Student Name _	
Teacher Name _	
School	
System	





Tennessee Comprehensive Assessment Program English Linguistically Simplified Assessment ~ Grade 7 Practice Test

**Version B** 





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## Introduction

#### What is the TCAP English Linguistically Simplified Assessment (ELSA)?

The TCAP English Linguistically Simplified Assessment (ELSA) is the TCAP Achievement Test in "simplified" English. It is a multiple-choice test designed to measure student achievement in certain skills in four content areas: Reading/Language Arts, Mathematics, Science, and Social Studies. The questions in this practice test are examples of items used in the actual test.

#### What are the questions testing?

Questions are written to test student performance in state content standards. The State Content Standards and Performance Indicators were developed by the Tennessee Department of Education. These Standards and Performance Indicators are listed on the State Department of Education Web site at http://www.state.tn.us/education/curriculum.shtml.

#### Who will be tested?

Students who are Limited English Proficient (LEP) in grades 3 through 8 will be tested.

#### How long will the tests take?

The length of the tests will vary, depending on the grade level. The time limits are generous and allow most students time to finish. Extended time limits only apply to students who are eligible for special or English Language Learner (ELL) accommodations.

#### How will the tests be scored?

The test answers will be machine scored. Results from the test provide information about how well students performed on the content being tested.

#### May calculators be used?

Calculators may be used on Part 1 and 2 of the mathematics portions of the TCAP Achievement Test (grades 3–8) as per system policy.

#### Which test accommodations may be used?

The TCAP English Linguistically Simplified Assessment may be administered using various procedures that are used during the student's daily educational program. Certain conditions must be met for students to be eligible for Special and ELL accommodations.

#### What is the purpose of the practice test?

In a classroom learning session, these questions can be used to prepare students for the actual test. Teachers can use the practice test to help familiarize students with the format of test questions and how the actual test will be administered. This practice test can also be used to inform parents of the type of test their children will be taking.

#### Here are some tips for preparing students for the test.

Remind students to:

<u>Relax</u>: It is normal to be somewhat anxious before the test. Remember that the score is only one of a number of measures of performance.

**Listen**: Listen to and read the test directions carefully.

<u>Plan Use of Time</u>: First, answer all the questions you are sure about. Do not spend too much time on any one question. If a question seems to take too long, skip it and return to it later if you have extra time.

<u>Pause and Think</u>: If you are not sure how to answer a question, carefully read it again. Rule out answer choices that you know are incorrect and then choose from those that remain.

# Reading and Language Arts



Part 1

**Directions** 

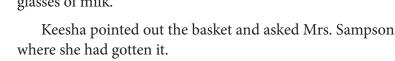
Read the story. Then answer Numbers 1 through 8.



- Keesha sighed as she reached Mrs. Sampson's front steps. Climbing them slowly, she tried to shake off her disappointment. She had planned to spend her day at the library researching ideas for her history project. Keesha loved learning and could not wait to sit down in front of the computer and find inspiration. Instead, she was spending the day with her neighbor, Mrs. Sampson, because her mother was called to work unexpectedly. Keesha did not want to hurt Mrs. Sampson's feelings, but it was difficult to imagine how the two of them would pass the time.
- Before Keesha could knock, the door opened and Mrs. Sampson stood before her, smiling widely. Though stooped with age, her brown eyes twinkled with warmth as she welcomed her young visitor. Stepping aside, Mrs. Sampson invited Keesha into her warm and cozy living room.
- "Hello, dear," Mrs. Sampson said in a voice that reminded Keesha of warm honey. "I am so happy you are going to spend the day with me. What fun to have a young visitor!"
- "Yes," Keesha replied, offering a smile that did not quite reach her eyes. "What fun."
- Mrs. Sampson chuckled knowingly, causing Keesha's cheeks to redden with embarrassment. "Now, I know this is not the way you had planned to spend your Saturday, but I bet we can find something to keep you occupied."
- Mrs. Sampson turned and shuffled off toward the kitchen. "Sit right here in the living room," she called over her shoulder. "I'll be right back."

Go On ▶

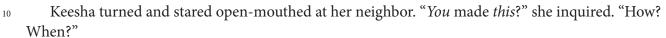
Instead of sitting, Keesha walked slowly around the living room, scanning the trinkets and collectibles lining the shelves and tables. As she turned, a basket sitting on the mantle above the fireplace caught Keesha's eye. The basket appeared to be intricately woven out of some type of grass, and the result was a beautiful and complex design. It was wide and round at the base, had an impossibly narrow neck that rose up several inches, and was topped with a tiny lid. Keesha was fascinated by how the artist had been able to weave the grass in such a tight pattern. She was still examining the piece when Mrs. Sampson returned with a tray of cookies and two glasses of milk.

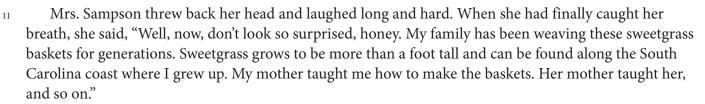


"Oh, I made it," Mrs. Sampson replied in a tone that almost concealed the pride in her voice.

12

13





The two sat in the living room, and for the next half-hour, Mrs. Sampson shared with Keesha the tradition of sweetgrass basket weaving. Keesha sat entranced, nibbling cookies while Mrs. Sampson told her how she began weaving when she was a little girl, much younger than Keesha was now. As she talked, Mrs. Sampson pointed to various examples of her work that were hidden throughout the room: a decorative bowl sitting on a table, several small pieces that looked like vases, and finally, a large basket that sat on the floor next to her rocking chair. Inside, Keesha could see pieces of loose grass waiting to be woven.

When Mrs. Sampson paused for a sip of milk, Keesha asked timidly, "Do you think you could teach me how to weave?"

Mrs. Sampson was not able to hide the surprise in her eyes. "Why, I would love to do that, and there is no time like the present."

Keesha watched as Mrs. Sampson collected her supplies and then positioned herself next to Keesha. She handed Keesha a small disk of woven grass.



"This is the base of a basket I started. Why don't you finish it up for me?" Mrs. Sampson handed Keesha a pointed tool and showed her how to twist, roll, and poke the grass around the base of the basket. Keesha worked diligently to make her grass rolls as tight as the ones she'd seen on Mrs. Sampson's baskets, but she found herself having to go very slowly in order to maintain the proper technique. As the two worked together, Mrs. Sampson shared stories of her family and spoke with pride about this unique tradition that had been passed down in her family through generations.

Keesha had doubled the size of her basket base when she was startled by a knock at the door. Looking up, she saw her mother and was stunned when she realized that nearly three hours had passed since she had arrived. Keesha's mother thanked Mrs. Sampson and then motioned for Keesha to do the same.

"Thank you for letting me stay with you and for showing me how to weave," Keesha said formally. Then, grinning shyly, she asked, "Do you think I could come over next Saturday and learn how to build the sides of my basket?"

- Mrs. Sampson smiled happily. "Well, now, I think that would be just fine."
- After they said their goodbyes, Keesha and her mother walked back across the lawn toward their house.
- "How about I take you to the library so you can research ideas for your history project topic?" Mom asked.
- Keesha smiled and put an arm around her mother's waist. "I definitely need to go to the library, but not for a topic."
- Keesha laughed at her mother's puzzled look. "I need to find sources on the history of basket weaving."

### **1** Read this sentence from Paragraph 7.

17

18

19

The basket appeared to be <u>intricately</u> woven out of some type of grass, and the result was a beautiful and complex design.

#### In the sentence, the word <u>intricately</u> means

- A not long past; recently.
- **B** in a complicated or elaborate way.
- **C** without a defined plan or course of action.
- **D** in a rapid manner; hurriedly.

- Based on the story, what can the reader understand about Keesha's personality?
  - **F** Keesha is curious.
  - **G** Keesha is cautious.
  - **H** Keesha is humorous.
  - J Keesha is adventurous.
- **3** What will Keesha most likely do next?
  - **A** Keesha will stay with Mrs. Sampson every Saturday.
  - **B** Keesha will write a report about what she learned with Mrs. Sampson.
  - **C** Keesha will ask Mrs. Sampson to show her more baskets.
  - **D** Keesha will teach her mother what Mrs. Sampson taught her.
- 4 What is the main idea of Paragraphs 11 and 12?
  - **F** Mrs. Sampson explains to Keesha that many people want to learn to make sweetgrass baskets.
  - **G** Mrs. Sampson shares with Keesha that many people in South Carolina make sweetgrass baskets.
  - **H** Mrs. Sampson lets Keesha know how much she enjoys displaying sweetgrass baskets in her home.
  - **J** Mrs. Sampson tells Keesha about the historical tradition of making sweetgrass baskets.
- Which event is part of the rising action?
  - **A** Keesha arrives at Mrs. Sampson's house.
  - **B** Keesha asks Mrs. Sampson about a basket.
  - **C** Keesha's mother knocks at the door.
  - **D** Keesha mother offers to take her to the library.

## 6 Which sentence from the story best helps the reader place the setting in current times?

- **F** Keesha loved learning and could not wait to sit down in front of the computer and find inspiration.
- **G** Keesha was fascinated by how the artist had been able to weave the grass in such a tight pattern.
- **H** Then, grinning shyly, she asked, "Do you think I could come over next Saturday and learn how to build the sides of my basket?"
- **J** "How about I take you to the library so you can research ideas for your history project topic?" Mom asked.

## 7 In the story, Keesha's character traits are best understood by what

- **A** Mrs. Sampson says to Keesha.
- **B** Mrs. Sampson thinks to herself.
- **C** Keesha says to Mrs. Sampson.
- **D** Keesha's mother says about Keesha.

#### **8** Which literary element is present in this story?

- **F** a flashback to Mrs. Sampson's childhood days
- **G** foreshadowing of Keesha weaving her own baskets
- **H** the irony that Keesha enjoys what she was dreading
- **J** symbolism of a basket representing the family

**Directions** 

Brian gave this speech in his social studies class. Read the speech and answer Numbers 9 through 21.

## Taking a Break from Technology

- For many people, being without any electronic devices creates an uneasy feeling. I recently experienced a weekend without electronics. I am now convinced that all people can benefit from turning off their electronics from time to time. Allow me to share my experience.
- Last month, my family and I drove to my Aunt Nan's home, which is in a remote mountain village. My aunt was preparing to move closer to where we live. The purpose of our visit was to help her pack her belongings. During the long car ride, my dad informed us that Aunt Nan's style of living was more primitive than we were accustomed to. We wouldn't hear cell phones ring because signals for electronic devices are not reliable in the mountains. My dad also told us that Aunt Nan had a television but received very few channels. My mother added that my aunt doesn't own a computer and that I would need to write my English paper on Aunt Nan's typewriter. I felt panic rising at the thought of having to write without spell check.
- Once we finally arrived at Aunt Nan's house, there was plenty of work to do. We organized books, packed household items, and moved boxes into the garage. Very quickly, however, I realized that it was difficult to figure out what to do in my free moments. I was used to watching television or DVD movies in my spare time. I was becoming restless.
- I'm sure that adults you know have shared anecdotes about when they were kids. They frequently tell us stories about the games they played and how they had time to think quietly when they were our age. I had never understood why thinking quietly was a good thing. Our parents grew up at a time when electronic devices were not advanced, so instant communication with friends and family wasn't even possible. Cordless phones and cell phones hadn't been invented. Even stranger is the fact that until the 1980s, most computers were bigger than refrigerators. E-mail was extremely rare and instant messaging had yet to be invented.
  - Once the packing was finished, there seemed to be nothing else to do. All the quiet thinking time made me uncomfortable, so I began writing my English paper using my aunt's typewriter. A story idea popped into my head right away. I wrote about a futuristic fantasy world that was suddenly deprived of all electronic devices. The old typewriter was fun to use, but I had to be a lot more careful about making typing mistakes since there was no delete key. The best part of using the typewriter was hearing the clacking sound that the keys made and the dinging of a bell when I finished typing every line.

I soon finished my paper. Reflecting on some of the stories my parents had shared with me helped me write my own story. My characters had time to hike, draw, make unusual crafts, and design original games using everyday objects—much like my parents and grandparents did. The process of putting these ideas on paper made me think that our dependence on electronics has dulled our creativity.



- On the last night of our trip, my family gathered on my aunt's porch and regarded the mountain view for the last time. I entertained everyone by reading my story to them. At the end of the story, everyone clapped and cheered. Even I grinned sheepishly; I understood the irony of borrowing their stories to write my own. With my paper I was admitting that life and even fun are possible without telephones, or televisions, or movies.
- I must admit that the temporary loss of electronic devices was a positive experience. I learned that having time to think quietly is refreshing. I also learned that I didn't miss the constant interruptions from phone calls or texts during conversations with my family. Spending time without television or instant messages actually seemed to enhance my creativity. As further proof of the benefits of time without modern devices, I was able to complete my school assignment easily. Happily, I got an "A" on my short story.
- I hope my speech convinces you that there are advantages to turning off electronic devices once in a while. In short, I think that our reliance on electronics limits our ability to concentrate and think creatively. I challenge you to spend a Saturday, or even a whole weekend, without turning on any electronic devices. Maybe you will discover the benefit of thinking quietly as well.

During the long car ride, my dad informed us that Aunt Nan's style of living was more <u>primitive</u> than we were accustomed to. We wouldn't hear cell phones ring because signals for electronic devices are not reliable in the mountains. My dad also told us that Aunt Nan had a television but received very few channels. My mother added that my aunt doesn't own a computer and that I would need to write my English paper on Aunt Nan's typewriter.

#### What does primitive mean?

- **A** quiet
- **B** miserable
- **C** self-centered
- **D** old-fashioned

## **10** Read this sentence from Paragraph 7.

On the last night of our trip, my family gathered on my aunt's porch and <u>regarded</u> the mountain view for the last time.

#### What does the underlined word mean?

- **F** discussed
- **G** photographed
- **H** appreciated
- **J** remembered

### 11 Brian gives this speech in order to

- **A** describe daily life without modern-day electronics for listeners.
- **B** persuade others to turn off their technology periodically.
- **C** explain to others how life now compares to life before instant communication.
- **D** entertain listeners with a story about a weekend in the mountains.

## 12 Who is Brian mainly speaking to in his speech?

- **F** his classmates
- **G** history teachers
- **H** a group of parents
- **J** a computer company

## 13 Which sentence from the speech is the thesis statement?

- **A** For many people, being without any electronic devices creates an uneasy feeling.
- **B** I am now convinced that all people can benefit from turning off their electronics from time to time.
- **C** Our parents grew up at a time when electronic devices were not advanced, so instant communication with friends and family wasn't even possible.
- **D** The process of putting these ideas on paper made me think that our dependence on electronics had dulled our creativity.

### 14 What can Brian do to keep his listeners' attention?

- **F** speak in a soft tone of voice
- **G** look at the back wall of the room
- **H** pronounce words clearly
- J read directly from notecards

### 15 Before writing his speech, Brian organized his ideas.

Introduction
Time without Technology
Closing Remarks

#### Where should he place "Results of the Experience"?

- **A** before the Introduction
- **B** after the Introduction
- **C** before the Closing Remarks
- **D** after the Closing Remarks

## **16** The organizational structure Brian uses in Paragraph 5 is mainly

- **F** sequential.
- **G** comparison-contrast.
- **H** problem-solution.
- **J** cause-effect.

### 17 Which paragraph is a critique of the speech?

- A Brian spends a weekend without access to electronics. He finds that he can write a paper quicker without the constant interruptions, as well as help his aunt pack for her move. He even enjoys his break from electronics.
- **B** In a world of instant communication, tremendous importance is placed on a person's electronic devices. Brian would like to change this dependence. He proposes that people give up electronics for a day and realize the benefits that an electronic-free day has to offer.
- **C** Texting, using the Internet, and playing video games are relaxing activities for some people. As a result, for many, the thought of a day without cell phones, e-mails, or television is a day full of anxiety. However, Brian believes that people may find the opposite is true.
- **D** Brian makes some interesting points, but he presents no research findings to support his recommendation. Brian's experience seems to have convinced him, but listeners may want a second opinion. Some people think that electronics make them more creative.

## After listening to the speech, a student wants to research Brian's claims about the use of electronic devices. Choose the most focused research topic.

- **F** why students use cell phone applications
- **G** how cell phone use affects concentration
- **H** the impact of computer use in schools
- **J** the effect of computers on everyday life

## Which excerpt from the speech is an opinion?

- **A** My aunt was preparing to move closer to where we live.
- **B** The purpose of our visit was to help her pack her belongings.
- **C** My characters had time to hike, draw, make unusual crafts, and design original games . . .
- **D** ... life and even fun are possible without telephones, or televisions, or movies.

## **20** Which picture could Brian use to make the speech more effective?

- **F** a person texting on a cell phone
- **G** a person carrying packing boxes
- **H** a photograph of him with his family
- **J** a person enjoying a scenic view

## 21 Brian most likely included the picture of him on his aunt's porch to show

- **A** how easy it was for him to write the story for class.
- **B** the mountainous area in which she lived.
- **C** the family having fun without computers and video games.
- **D** why the story he wrote was so successful.



Felicity wrote this report. It contains mistakes. Read the report and answer Numbers 22 through 34.

## **How Chameleons Change Color**

- No lizard is as interesting, or as misunderstood, as the chameleon. One myth about chameleons seems almost universally believed: they change color to blend in with their environment. People may believe this myth because they usually see a green chameleon perched on a green leaf however this myth is not true. Chameleons don't change their skin color in order to match their environments; they change color depending on light and temperature. They also use color to express their moods.
- Approximately one hundred different species of chameleons exist. Although these different species of chameleons live in a variety of environments and are many different colors, they do share common skin characteristics. They have very thin skin, and underneath their skin are several layers of cells called chromatophores, which can be stimulated to produce many different shades of color. There are two layers of chromatophores just underneath the skin. The upper layer has red and yellow chromatophores, and the lower layer has blue and white chromatophores. These three primary colors, red, blue, and yellow, plus white, can produce many shades of color, from green to orange to black.
- In contrast, if the weather is cold, the chameleon's brain sends a message to the skin to activate the blue and red cells. The blue and red cells grow more large and show through the lizard's thin skin. This makes the color of the chameleon darker and allows the lizard to absorb heat more from the sun.
- Chameleons fasinate people because they change color, but how they change color is just as amazing. The stimulation of chromatophores located below the skin creates these colors. Although they don't change color to blend in with their environments, they do change color in response to their own feelings. Chameleons might change their color just to feel more comfortable. Many people may still believe that chameleons change color to conform to their environments.
- In hot weather, the chromatophores with the lighter yellow and white colors grow larger, reflecting the sun and the heat. Chameleons can also change color to show anger; some change to black, while others become yellow.

## **22** Read this sentence from Paragraph 3.

The blue and red cells grow more large and show through the lizard's thin skin.

#### Which word or words correct the sentence?

- **F** most larger
- **G** more largest
- **H** larger
- **J** largest

### **23** Read this incorrect sentence from Paragraph 3.

This makes the color of the chameleon darker and allows the lizard to absorb heat more from the sun.

#### Which sentence shows the correct way to write the sentence above?

- **A** This makes the color of the chameleon darker from the sun and allows the lizard to absorb of heat more.
- **B** This makes the color of the chameleon darker and allows the lizard to absorb more heat from the sun.
- **C** This makes the color of the chameleon darker from the sun and allows the lizard to absorb heat more.
- **D** This makes the color of the chameleon darker and allows the lizard to absorb more of the sun from the heat.

### 24 The author's purpose for writing this report is to

- **F** entertain readers with a story about chameleons.
- **G** persuade readers to purchase chameleons as pets.
- **H** inform readers about the areas where chameleons live.
- **J** describe to readers how chameleons blend into environments.

## Which would make the best subtitle for this report?

- **A** The effects of light, temperature, and mood
- **B** Making blue, red, and yellow cells visible
- **C** Not just active, but adaptable too
- **D** They are interesting creatures

## **26** This report is an example of which type of writing?

- **F** descriptive
- **G** persuasive
- **H** narrative
- **J** technical

## Who would most likely be interested in reading this report?

- A a gardener researching reptiles who eat plants
- **B** a student studying different types of reptiles
- **C** a teacher searching for an article about reptiles
- **D** a scientist investigating areas where reptiles live

## **28** Paragraph 5 is in the wrong place in the report. Where should it be moved?

- **F** before Paragraph 1
- **G** before Paragraph 2
- **H** before Paragraph 3
- J before Paragraph 4

## **29** Read these sentences from Paragraph 5.

In hot weather, the chromatophores with the lighter yellow and white colors grow larger, reflecting the sun and the heat. \_\_\_\_\_\_, chameleons can also change color to show anger; some change to black, while others become yellow.

#### Which word belongs in the blank space?

- **A** Nevertheless
- **B** Accordingly
- **C** Therefore
- **D** Likewise

### **30** Which sentence from the report is the thesis statement?

- **F** One myth about chameleons seems almost universally believed: they change color to blend in with their environment.
- **G** Chameleons don't change their skin color in order to match their environments; they change color depending on light and temperature.
- **H** Although these different species of chameleons live in a variety of environments and are many different colors, they do share common skin characteristics.
- **J** These three primary colors, red, blue, and yellow, plus white, can produce many shades of color, from green to orange to black.

## **31** Read this sentence from Paragraph 4.

Chameleons <u>fasinate</u> people because they change color, but how they change color is just as amazing.

#### Choose the correct way to spell the underlined word.

- **A** facsinate
- **B** facsenate
- **C** fascinate
- **D** fascenate

## **32** Which sentence is the best conclusion for Paragraph 1?

- **F** So it is most important to find out about how changes in chameleons' bodies can produce such a variety of colors.
- **G** People often create myths to explain things they don't understand in the natural environment.
- **H** Temperature has a profound effect on the current color of a chameleon, and it is important to study this.
- **J** The mood of most lizards causes interior as well as exterior changes, so this must be determined.

## Which fact would be best to add to Paragraph 2?

- **A** Other types of lizards, such as geckos, also have very thin skin.
- **B** Although all chameleons change color, some can only display brown tones, whereas others can create vibrant hues.
- **C** Like lizards, fish have interesting cellular activity, but their skin cells also function as added insulation.
- **D** Chameleons are interesting pets to own because they turn so many different colors.

## **34** Which sentence from Paragraph 4 is unnecessary?

- **F** The stimulation of chromatophores located below the skin creates these colors.
- **G** Although they don't change color to blend in with their environments, they do change color in response to both their environments and their own feelings.
- **H** Chameleons might change their color just to feel more comfortable.
- **J** Many people may still believe that chameleons change color to conform to their environments.

#### 35 Read these steps for applying a coat of varnish to a bench.

- 1. Apply the coat of varnish uniformly, following the grain of the wood to ensure a good result.
- 2. Make sure the surface is clean and ready to varnish. Use a light sandpaper to remove any minor imperfections.
- 3. Begin with a light first coat of varnish. It is better to apply several thin coats than one thick coat.
- 4. Allow the coat of varnish to dry for at least twenty-four hours before applying a second coat.

#### Which is the best way to order the steps?

- 2, 4, 3, 1
- 2, 3, 1, 4
- C 3, 1, 2, 4
- D 3, 4, 1, 2

#### **36** Read this paragraph from an essay.

People sometimes complain that a product might be on the cutting edge one minute and seem hopelessly out of date the next. One can certainly see the influence of technological change with the history of telephones. Just as cell towers have replaced landlines, satellite telephones will replace cell phones and few people will use them, either. Changes in technology seem to influence our lives constantly.

#### Which sentence from the paragraph is an example of false premise?

- **F** People sometimes complain that a product might be on the cutting edge one minute and seem hopelessly out of date the next.
- **G** One can certainly see the influence of technological change with the history of telephones.
- **H** Just as cell towers have replaced landlines, satellite telephones will replace cell phones and few people will use them, either.
- **J** Changes in technology seem to influence our lives constantly.

### **37** Which sentence correctly uses quotation marks?

- A "Yes," he said with a nod of agreement, "the park should stay open until 9:00 p.m."
- **B** Mrs. Crandall proclaimed with excitement, "Today is the day that we begin our masterpieces"!
- **C** "Darla patted her friend on the back and assured her that Everything will work out."
- **D** "I want to know why you are so late?" Mr. Grieg "began impatiently."

### **38** Read this sentence.

Essays and speeches written during the Revolutionary War often called <u>for government</u> to protect three basic ideas life, liberty, and property.

#### Which revision shows correct use of a colon?

- **F** for government to protect: three basic ideas life, liberty, and property
- **G** for government: to protect three basic ideas life, liberty, and property
- **H** for government to protect three basic ideas: life, liberty, and property
- **J** for government to protect three basic: ideas life, liberty, and property

## **39** Which sentence is written incorrectly?

- **A** Some people feel that the speaker's use of the word *monstrous* to describe the painting is extreme.
- **B** Writing a paper about a creative work such as a poem or essay is itself an act of *creation*.
- **C** Examining *Chart 3* should have been enough to convince even the strictest critic.
- **D** Stevens' novel *Chance or Choice* is one of those books many people read again and again.

#### 40

#### Read this paragraph from a radio advertisement.

Light, flaky, and utterly delicious. Those words aptly describe "Mother Samuelson's Homemade Pie Crusts." Add any kind of fruit or cream filling to make a fragrant and fresh pie for your family. These exclusive pie crusts ship directly from our kitchen to your kitchen table. Sometimes people ask us, "How do you make those crusts so flaky?" Well, Mother Samuelson stands for exceptional flavor and quality, and Mother Samuelson wouldn't have it any other way.

#### Which persuasive device is used most in the advertisement?

- **F** loaded terms
- **G** name-calling
- **H** bandwagon
- J plain folks
- Laura is creating a website for the Chess Club to help recruit new members. Which medium would be best for Laura to include?
  - **A** a timeline showing the history of the game of chess
  - **B** a website with instructions for a virtual game of chess
  - **C** a video of the club president accepting an award at a chess competition
  - **D** a slideshow of photographs showing club members at chess competitions

#### 42

#### Read this paragraph from a student speech.

Students identify with older students more than with teachers, so it makes sense to have high school mentors at the middle school. Our middle school now has high school students serving as mentors in every grade and in every subject. We have mentors helping students with reading assignments, math homework, and even with physical education classes. If teachers have their way, the mentoring program will only increase.

#### Which sentence from the paragraph shows an example of deductive reasoning?

- **F** Students identify with older students more than with teachers, so it makes sense to have high school mentors at the middle school.
- **G** Our middle school now has high school students serving as mentors in every grade and in every subject.
- **H** We have mentors helping students with reading assignments, math homework, and even with physical education classes.
- **J** If teachers have their way, the mentoring program will only increase.



#### **Directions**

5

25

Read the poem. Then answer Numbers 43 through 50

## **Save My Place**

Save my place, would you?

I hate being in line,

Though everyone says that this show is so fine,

I don't want to be here until I'm one hundred-nine.

So please be kind and save my place!

Save my place, would you?

I just need a drink,

It's as dry and dusty as a desert, I think.

They should put up an awning, or install a sink.

I need to cool off but am coming right back!

Save my place, won't you?

I must get a hat

To protect me from overhead birds that go splat

When they twitter and flitter above our heads - SCAT!

There they are! Just please save my place!

Save my place, will you?

I need to sit down,

For my legs are all shaky from standing around,

And I've wrinkled my glittery, pretty princess gown!

20 I'm the Queen, so you must save my place!

Save my place, servants!

A queen needs her throne!

You others can stand here, but I sit alone.

While you work at the waiting game, I moan and I groan

"Hurry UP! Why can't we go in?"

Save my place — what happened?

Now where is that line

To get into the show that they say is so fine?

Do you have your ticket? I think I've lost mine.

I thought you were saving my place!



## **43** Read Line 20.

I'm the Queen, so you must save my place!

#### The author uses metaphor in this line to

- **A** show the self-importance of the speaker.
- **B** show the acting skills of the speaker.
- **C** explain why others follow the speaker's orders.
- **D** explain the speaker's reasons for making requests.

## 44 The author wrote this poem to

- **F** persuade readers to attend special performances.
- **G** inform readers about proper etiquette while waiting in line.
- **H** describe for readers what it is like to obtain tickets to a special show.
- **J** entertain readers with a funny situation involving the speaker.

## Which line from the poem shows that it is written from a first-person point of view?

- **A** Though everyone says that this show is so fine,
- **B** They should put up an awning, or install a sink.
- **C** For my legs are all shaky from standing around,
- **D** A queen needs her throne!

## 46 Readers know "Save My Place" is a poem because it

- **F** utilizes an everyday setting.
- **G** uses imagery and a rhythmical pattern.
- **H** tells an imaginary story that is believable.
- **J** tells a true anecdote about real people and events.

## 47 This poem is similar to a drama because it

- **A** lacks a clear resolution.
- **B** employs multiple settings.
- **C** emphasizes plot over theme.
- **D** contains a speaking character.

## 48 Which sentence is the theme of the poem?

- **F** Some people believe they are better than others.
- **G** Waiting patiently demonstrates courteous behavior.
- **H** There are many ways to deal with difficult people.
- **J** Making demands of others shows confidence.

## **49** Read Lines 27 through 29.

Now where is that line To get into the show that they say is so fine? Do you have your ticket? I think I've lost mine.

#### The sound effect used most in these lines is

- **A** accent to stress the thoughts of the speaker.
- **B** rhyme to emphasize a sense of playfulness.
- **C** alliteration to add excitement to the speaker's feelings.
- **D** onomatopoeia to share the concern in the speaker's voice.

## **50** What is the speaker's main conflict?

- **F** person vs. environment
- **G** person vs. technology
- **H** person vs. person
- J person vs. self

## **Lumberjack Art**

When people think of an artist, they probably do not imagine a lumberjack cutting down trees with a chainsaw. People are more likely to imagine a sculptor working with clay and marble. Yet many lumberjacks consider themselves to be artists. Instead of patiently chipping away at a large block of marble, however, lumberjacks use chainsaws to carve their masterpieces from wood.

#### Folk Art

- Wooden sculptures created with chainsaws are perfect examples of folk art. Everyday tools are used to create art that focuses on subjects found in nature, such as bears or other forest animals. Modern lumberjacks work in forested areas and use chainsaws daily, so they are inspired on a regular basis to carve their wooden sculptures. Not all lumberjacks are artists, but some chainsaw artists have been lumberjacks.
- A lumberjack who is also an artist might cut down a tree during a workday. If the stump, or the bottom of the tree, is a good size, the artist might be motivated to sculpt the stump into the shape of a forest animal. The chainsaw artist might also carve other large blocks of wood. Sometimes a homeowner might cut down a tree in the yard and then hire a chainsaw artist to create an outdoor sculpture from the stump. So, this art owes its origins to everyday tasks and nature.



Artist carving an owl

#### **Artistic Variety**

The origins of chainsaw art may be humble, but the practice has expanded well beyond turning a backyard stump into a pretty memory of the tree that once stood there. Chainsaw artists today often purchase the wood they use. In some ways they are like traditional woodcarvers. One artist said that using chainsaws is simply more practical. This person began his work as a traditional woodcarver — that is, he used hand tools to carve the wood into the shapes he wanted. To save time, he began using a chainsaw to remove some portions of the wooden block. This artist realized that the chainsaw not only trimmed down large pieces of wood quickly, but it also produced a distinctive and beautiful pattern on the wood. These patterns would not be seen in other pieces of art. Eventually, the artist began using the chainsaw for nearly all of his carvings.

Because these chainsaw artists use large sections of trees, they like to create outdoor wildlife

sculptures. Moose are popular subjects, as are wolves and raccoons. One popular sculpture is the mascot of the National Forest Service, Smokey Bear. People sometimes want mascots of their favorite sports teams too.

#### **Potential Pitfalls**

Chainsaw artists must be aware of several potential problems in their work. Possible challenges involve the limitations of the wood they use. Some blocks of wood have knots, or hard dark circles, in them, and the artist has to take these flaws into consideration when planning a design. Dealing with such pitfalls is important to completing a beautifully finished product.

The age of the wood after it is cut is another challenge for the artist to consider. Experienced chainsaw artists do not waste their time carving wood that has not cured or dried out. Such wood is referred to as "green" or "raw." If an artist carves a green log, the sculpture is more likely to crack and split as it dries. Using dried wood helps prevent this problem, and once the sculpture is finished, wood oil or varnish can be used to protect it. Careful treatment is



Bear chainsaw sculpture

particularly important with chainsaw art. After all, these sculptures are typically intended to be displayed outdoors in all kinds of weather.

#### **Art Events**

Chainsaw art is not only displayed outdoors; it is often created in very public outdoor places as well. Some sculptors carve on the street or directly in front of their shops. These exhibitions of their skill help them draw customers. Indeed, people often appreciate the art more when they are aware of the process used to create it. Each year, there are many gatherings of chainsaw artists at which they can demonstrate their techniques as well as show off their artwork. These events, like Pennsylvania's annual Ridgeway Chainsaw Carver's Rendezvous, give artists a chance to impress onlookers with skills such as speed, subject matter, and artistry. Tens of thousands of spectators attend the Rendezvous annually.

#### The Art of the Chainsaw

However unusual it may seem, chainsaw art is here to stay. People who use tree trunks and their work tools to create art may not fit our image of typical artists. However, it is good to remember that even sculptors who create masterpieces from marble use power tools these days. Of course, the ultimate test of success for any type of art is the enthusiasm and acceptance of the public. That verdict is in: people love watching chainsaw artists work, and people love the sculptures they create.

**51** Read this sentence from Paragraph 8.

These exhibitions of their skill help them draw customers.

#### What does the underlined word mean?

- **A** sketch
- **B** extend
- **C** compose
- **D** attract

**52** Read this excerpt from Paragraph 4.

This artist realized that the chainsaw not only trimmed down large pieces of wood quickly, but it also produced a <u>distinctive</u> and beautiful pattern on the wood. These patterns would not be seen in other pieces of art.

#### Choose a synonym for the underlined word.

- **F** smooth
- **G** fancy
- **H** ideal
- **J** unusual

- Which source would provide the <u>most</u> reliable information about where lumberjack artists display their work?
  - **A** an online article discussing a lumberjack artist
  - **B** an advertisement for upcoming lumberjack art exhibitions
  - **C** a newspaper feature about the techniques used by a lumberjack artist
  - **D** an eyewitness account of the judging process for a lumberjack art competition
- A student wants to learn more about lumberjack art. Which would be a primary source for her research?
  - **F** an online video showing lumberjack art
  - **G** a magazine article about lumberjack art
  - **H** an interview with a lumberjack artist
  - **J** a biography about a lumberjack artist
- Which sentence from the passage is an opinion?
  - **A** The chainsaw artist might also carve other large blocks of wood.
  - **B** Chainsaw artists today often purchase the wood they use.
  - **C** Eventually, the artist began using the chainsaw for nearly all of his carvings.
  - **D** Dealing with such pitfalls is important to completing a beautifully finished product.

# Which sentence from the passage best shows that chainsaw art is becoming more popular?

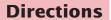
- **F** One popular sculpture is the mascot of the National Forest Service, Smokey Bear.
- **G** Some sculptors carve on the street or directly in front of their shops.
- **H** Each year, there are many gatherings of chainsaw artists at which they can demonstrate their techniques as well as show off their artwork.
- **J** Of course, the ultimate test of success for any type of art is the enthusiasm and acceptance of the public.

# 57 In which section will the reader find out what subjects are commonly used in lumberjack art?

- **A** Artistic Variety
- **B** Potential Pitfalls
- **C** Art Events
- **D** The Art of the Chainsaw

# Lydia is preparing a presentation on lumberjack art. Which visual aid will best support her report?

- **F** a picture of a lumberjack cutting down a tree
- **G** a video showing lumberjack artists working
- **H** a cartoon drawing of a lumberjack at work
- **J** a poster with pictures of known lumberjack artists



Thea wrote this report for her science class. It contains mistakes. Read the report and then answer Numbers 59 through 68.

### Green Jeans

- (1) Many people concerned with keeping Earth clean choose to act in a way that helps grass and trees stay green and healthy. (2) So people recycle or work to help the environment, they are "going green." (3) Now a person can even go green while they purchase a pair of jeans. (4) The Levi Strauss Company a leader in the clothing industry has started using all-natural materials to create its new line of jeans. (5) These all-natural, or organic, materials used in the product benefit Earth because they are grown using less pesticide. (6) Therefore, fewer harsh chemicals enter Earth's soil and water supply. (7) Additionally, even the process the company uses to make these jeans are minimizing damage to Earth.
- (9) The materials used for the new Levi's jeans come from nature, the denim cloth is made from 100 percent organic cotton. (10) The wasteband buttons are fashioned from coconut shells. (11) All-natural products such as, potatoes mimosa flowers starch and a special French soap are mixed together to give the jeans a blue color. (12) The materials used are safe for the environment and protect the planet. (13) These materials produced a great pair of pants.

(8) The new jeans reflect the companys plans to protect the environment.

- (14) The way the Levi Strauss Company makes jeans is as important as using natural products. (15) The company uses a new process that avoids wasting natural resources. (16) For example, a study showed that about 920 gallons of water was needed when each pair of Levi's jeans was produced. (17) That water is like running for 106 minutes through a garden hose. (18) With this new process, 28 percent less water is used while manufacturing Levi's "Water<Less" igans.
- (19) Levi Strauss is not the first company to make Earth-friendly clothing. (20) However, among all major brands, it's the first company to offer fully organic denim jeans. (21) It is hoped that more companies will follow the example of the Levi Strauss Company. (22) This could mean that consumers will stop wearing "blue jeans" and start wearing "green jeans."

#### **59** Read Sentence 3.

Now a person can even go green while they purchase a pair of jeans.

#### Which sentence corrects the pronoun-antecedent agreement error?

- **A** Now a person can even go green while we purchase a pair of jeans.
- **B** Now people can even go green while he or she purchases a pair of jeans.
- **C** Now people can even go green while they purchase a pair of jeans.
- **D** Now a person can even go green while you purchase a pair of jeans.

# **60** Read Sentence 4.

The Levi Strauss Company a leader in the clothing industry has started using all-natural materials to create its new line of jeans.

#### Which revision uses an appositive phrase correctly?

- **F** The Levi Strauss Company a leader in the clothing industry, has started using all-natural materials to create its new line of jeans.
- **G** The Levi Strauss Company a leader in the clothing industry has started using, all-natural materials, to create its new line of jeans.
- **H** The Levi Strauss Company, a leader in the clothing industry, has started using all-natural materials to create its new line of jeans.
- **J** The Levi Strauss Company, a leader in the clothing industry has started using all-natural materials to create its new line of jeans.

# **61** Read Sentence 16.

For example, a study showed that about 920 gallons of water was needed when each pair of Levi's\* jeans was produced.

#### Which revision of the sentence uses an infinitive?

- A For example, a study showed that about 920 gallons of water was needed to produce each pair of Levi's jeans.
- **B** For example, a study demonstrated to experts that about 920 gallons of water was needed for producing each pair of Levi's \*jeans.
- **C** For example, a study showed that <u>close to</u> 920 gallons of water was needed in the production of each pair of Levi's each
- **D** For example, the most effective study up to the present found that about 920 gallons of water was needed so that each pair of Levi's jeans could be produced.

# **62** Read Sentence 7.

Additionally, even the process the company uses to make these jeans <u>are minimizing</u> damage to Earth.

#### Which word or words correct the sentence?

- **F** minimize
- **G** minimizes
- **H** have minimized
- l correct as is

### **63** Read Sentence 2.

So people recycle or work to help the environment, they are "going green."

#### Which word corrects the sentence?

- **A** Before
- **B** When
- **C** How
- **D** Unless

# **64** Read Sentence 17.

That water is like running for 106 minutes through a garden hose.

#### What is the best way to write this sentence?

- **F** That is like running water through a garden hose for 106 minutes.
- **G** That is, running water through a garden hose for like 106 minutes.
- **H** Through a garden hose, that water is like running for 106 minutes.
- **J** Correct as is

# **65** Read Sentence 11.

All-natural products such as, potatoes mimosa flowers starch and a special French soap are mixed together to give the jeans a blue color.

#### Which revision uses commas correctly?

- **A** All-natural products, such as potatoes, mimosa, flowers, starch, and a special French, soap are mixed together to give the jeans a blue color.
- **B** All-natural products such as potatoes, mimosa flowers, starch and a special French soap are mixed together to give the jeans a blue color.
- **C** All-natural products, such as, potatoes mimosa flowers starch and a special French soap are mixed together to give the jeans a blue color.
- All-natural products, such as potatoes, mimosa flowers, starch, and a special French soap, are mixed together to give the jeans a blue color.

# **66** Read Sentence 9.

The materials used come from nature for the <u>new Levi's</u> jeans, the denim cloth is made from 100 percent organic cotton.

#### What is the best way to correct this run-on sentence?

- F The materials used come from nature for the <u>new Levi's</u> jeans; and the denim cloth is made from 100 percent organic cotton.
- **G** The materials used come from nature for the <u>new Levi's</u> jeans, since the denim cloth is made from 100 percent organic cotton.
- H The materials used come from nature for the <u>new Levi's</u> jeans; the denim cloth is made from 100 percent organic cotton.
- J The materials used come from nature for the <u>new Levi's</u> jeans, but with denim cloth made from 100 percent organic cotton.

#### **67** Read Sentences 12 and 13.

The materials used are safe for the environment and protect the planet. These materials produced a great pair of pants.

#### What is the best way to combine these sentences?

- **A** Because both protecting the planet and producing a great pair of pants are safe for the environment, these materials are used.
- **B** The materials used are safe for the environment and protect the planet, or a great pair of pants is produced from these materials.
- **C** The materials used are safe for the environment and protect the planet a great pair of pants is produced from these materials.
- **D** Using materials that are safe for the environment protects the planet; it produces a great pair of pants too.

# Thea wants to add a sentence to the third paragraph. Which sentence will work best?

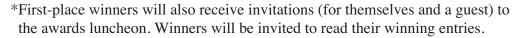
- **F** More than just one company can save money by conserving water.
- **G** The company now saves more than one million gallons of water annually.
- **H** When a company makes small changes in production it can have a positive impact on the environment.
- **J** This company is conserving water in a way that customers can copy by simply washing their jeans in cold water.

# Announcing Hamilton School District's Annual Creative Writing Contest

Are you the next J.K. Rowling, Judy Blume, E.B. White, or Dr. Seuss? If you think so, start writing!

Deadline: February 14, 2012

Awards: One award per grade and category		
First prize*	First prize* \$50 gift card: Bound to Be Read Bookstore	
Second prize	\$25 certificate: Page- Turner's Used Books	
Third prize	One-year subscription: Kids Write Magazine	



#### Contest Details

- Students in Grades 4 through 12 are encouraged to participate.
- Categories for submissions include fiction, poetry, and nonfiction.
- Prizes will be awarded in EACH category for every grade level.
- Student writing must be based on the specific themes outlined below.
- All entries must be original and follow the submission guidelines.
- Students may submit only one entry.

#### Creative Writing Categories

**Fiction:** These original stories should be no more than 1500 words in length. Common fictional elements such as setting, plot, and character development, as well as traditional literary devices should be included. The theme should center on overcoming a challenge.

**Poetry:** Rhyming or non-rhyming poetry that tells a story (narrative) or describes feelings, impressions, and thoughts (lyric) must not exceed 250 words. The theme should center on a season (winter, spring, summer, fall).

**Nonfiction:** Prose that contains facts but is written with literary devices and original style must be limited to 1000 words. The theme should center on an important event in your life.

#### **Submission Guidelines**

- Each school will set up a submission drop-off box in the school office.
- Submissions will be accepted from January 20 until 3:30 P.M. on February 14.
- Winners will be announced at each school on April 2.

#### **Submission Instructions**

- 1.) Format:
  - Times New Roman font, point size 12
  - Fiction and Nonfiction, double-spaced
  - Poetry, single-spaced
- 2.) Heading on the upper left corner of each page should include:
  - Contestant's full name
  - Grade
  - School's name
  - Category of the work (Fiction, Poetry, Nonfiction)
- 3.) All copies should be grammatically correct and contain no spelling errors.
- 4.) Keep a copy of your submission because the work will not be returned.
- 5.) Use one large manila envelope to submit the entry form with the entry. Label the outside front of the envelope with the following information:
  - Contestant's full name
  - Grade
  - School name
- 6.) Place your envelope in your school's drop-off box by the stated deadline.

Follow the guidelines closely, and good luck!

- 69 Presenting the flier to students will most likely cause them to
  - **A** experiment with different literary features in their writing.
  - **B** model their writing after that of their favorite authors.
  - **C** consider publishing more of their writing in the future.
  - **D** become excited about writing for a genuine purpose.
- **70** Read the analogy.

*Narrative is to story as lyric is to* \_\_\_\_\_\_.

Which word best completes the analogy?

- **F** rhyming
- **G** poetry
- **H** feelings
- **J** theme
- 71 According to the awards chart, the creator of the contest believes that
  - **A** students who write also enjoy reading.
  - **B** different competitions appeal to different students.
  - **C** winners should be able to select their prizes.
  - **D** interested students will be able to write well.

- Which question is answered in the section "Submission Guidelines"?
  - **F** What is the appropriate heading for each page?
  - **G** What is expected of entries in each writing category?
  - **H** When will entries be accepted for award consideration?
  - **J** When is the award luncheon for the first-place winners?
- Based on the flier, which information is important for students to include in submissions for the fiction category?
  - **A** a description of a personal experience
  - **B** the characters' reactions to difficulty
  - **C** a setting that clearly defines a season
  - **D** the point of view of an all-knowing narrator
- 74 Under which heading from the flier would students find eligibility requirements?
  - **F** Contest Details
  - **G** Creative Writing Categories
  - **H** Submission Guidelines
  - **J** Submission Instructions

#### **75** The reader can conclude from the chart that

- Α more second- and third-place prizes will be distributed than first-place prizes.
- В more first-place prizes will be awarded to Grade 12 students than Grade 4 students.
- C a certificate for Page-Turner's Used Books is more appealing than a gift card for the Bound to Be Read Bookstore.
- a one-year subscription to *Kids Write Magazine* costs less than the certificate to Page-Turner's Used Books.

#### **76** The main purpose of the flier is to

- F share information about some famous authors.
- G describe the different types of creative writing.
- Н explain how participation can improve writing skills.
- J provide information necessary to enter the writing contest.

#### **Directions**

Read and answer Numbers 77 through 83.

- 77 Choose the sentence that uses the underlined word correctly.
  - **A** My sister set at her desk in homeroom surrounded by her friends.
  - **B** "Peter," said Ms. Smith, "you can sit the book on the table by the door."
  - **C** Mr. Washington likes to sit at his workbench in the evenings.
  - **D** Connie said, "You will all have to set very still for the photographer."
- 78 Cheryl calls on other members of her project group to find out what their progress has been. She is most likely the group's
  - F leader.
  - **G** recorder.
  - H timekeeper.
  - J information gatherer.
- The bus routes and pickup times for a school district will change when the new school year begins. What is the <u>best</u> way for the superintendent to convey this information to families in the school district?
  - A announce instructions over the school loudspeaker
  - **B** post changes on a bulletin board at the school
  - **C** send a letter to parents in the school district explaining the new plan
  - **D** present a speech about the changes at a school board meeting

# **80** Read this paragraph from an essay about the life cycle of dragonflies.

Dragonflies have a variety of shapes and dazzling colors, but all experience the same life cycle. So beloved are dragonflies that many countries feature them on stamps. Beginning as eggs, they hatch and enter a larval stage spent in the water. At this point in its development, the dragonfly is called a "nymph." As the nymph grows, it becomes more like an adult dragonfly. In fact, near the end of the nymph stage, dragonflies look much like wingless dragonflies. Finally, the wings emerge, and the adult dragonfly achieves the familiar form most people recognize.

#### Which sentence should not be included in the paragraph?

- **F** Dragonflies have a variety of shapes and dazzling colors, but all experience the same life cycle.
- **G** So beloved are dragonflies that many countries feature them on stamps.
- **H** As the nymph grows, it becomes more like an adult dragonfly.
- **J** Finally, the wings emerge, and the adult dragonfly achieves the familiar form most people recognize.

# **81** The response to accept or decline an invitation is called the

- **A** du jour.
- **B** faux pas.
- **C** bon voyage.
- **D** RSVP.

- An interactive website allows users to use the mouse to point toward parts of digital cameras and learn what they do, how to adjust them, and how they produce the digital image. The main purpose of this website is most likely to
  - **F** persuade users to purchase the camera.
  - **G** inform users about the features of digital cameras.
  - **H** entertain users by allowing them to play with digital cameras.
  - **J** describe for users how fun digital cameras can be.
- 83 Look at this photograph.



A public service group is using this photograph in a poster promoting the health benefits of eating fruits and vegetables. Which caption would be best for the poster?

- **A** Just What the Doctor Ordered!
- **B** An Apple a Day!
- **C** Time to Eat Your Vegetables!
- **D** Fresh from the Garden!



DO NOT

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# **Mathematics**



# Part 1

The table below has 4 age groups, and for each group, the percent of the total population is shown.

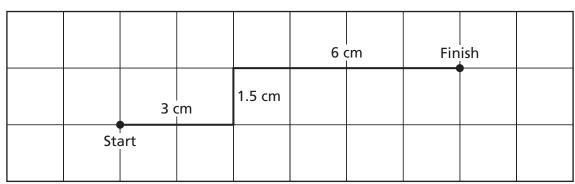
#### **Tennessee Population in 2009**

Age Group	Percent of Total Population	
0 to 4	7	
5 to 18	17	
19 to 64	63	
65 and over	13	

Based on this information, which ratio represents the group of 65 and over to the group of 0 to 18?

- Α 1:8
- 1:5
- 13:24
- D 13:17

#### **Parade Route**



**Scale** 3 cm = 480 m

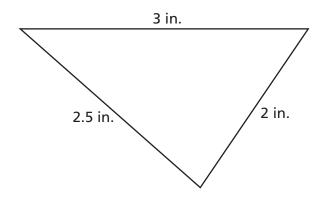
What is the actual length of the parade route?

- **F** 1,440 m
- **G** 1,680 m
- **H** 3,360 m
- **J** 5,040 m

An empty bottle weighs 1.2 pounds and can hold about 1.11 pounds of water. Which equation best represents the total weight, *y*, of bottles filled with water, as related to *x*, the number of bottles?

- **A** y = 1.2x + 1.11
- **B** y = 1.11x + 2.31
- **C** y = 1.2x
- **D** y = 2.31x

A bank logo has a triangle shape. When the logo is used for business letters, its size is shown by the figure below.



- A logo with a similar shape will appear near the top of the bank's office building. The triangle on the building will be 36 feet on its longest side. How long will it be on its shortest side?
- F 24 ft
- G 26 ft
- Н 30 ft
- J 35 ft
- Which inequality is true?
  - **A**  $\frac{4}{20} < \frac{3}{25}$
  - **B**  $\frac{7}{20} > \frac{8}{25}$
  - $c \frac{12}{25} < \frac{9}{20}$
  - **D**  $\frac{13}{25} > \frac{11}{20}$

- David filled his fish tank using 17 pitchers of hot and cold water. The amount of cold water he used was 1 less than 2 times the number of pitchers, h, of hot water he used. Which equation can be used to find h?
  - **F** 2h + 1 = 17
  - **G** 2h-1=17
  - **H** h + 2h + 1 = 17
  - h + 2h 1 = 17

- Jacob's bedroom floor and closet floor have similar rectangular shapes. Each dimension of the bedroom floor is  $2\frac{3}{4}$  times the corresponding dimension of the closet floor. The area of the closet floor is 20 square feet. Which measurement is closest to the area of the bedroom floor?
  - **A** 55 square feet
  - **B** 110 square feet
  - **C** 151 square feet
  - **D** 165 square feet

8

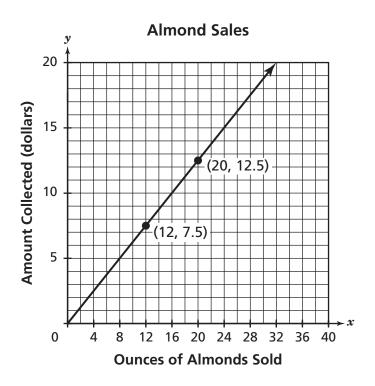
Terri played a card game with some friends.

- She started with a score of 0 points.
- She lost 2 points with every turn for the first 5 turns.
- She won 6 points when she took her sixth turn.

Which integer best represents Terri's score after her sixth turn?

- $\mathbf{F}$  -4
- G -1
- **H** 4
- **J** 16

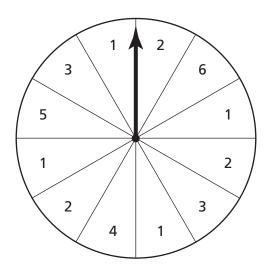
Dan sells almonds by the ounce. The graph below shows the relationship between the amount sold and the money he collects.



Which statement does the slope of the graph support?

- **A** When Dan sells 4 ounces of almonds, he collects \$5.
- **B** When Dan sells 5 ounces of almonds, he collects \$8.
- **C** Dan collects \$5 for every 8 ounces of almonds he sells.
- **D** Dan collects \$4 for every 5 ounces of almonds he sells.

- 10 Sandy mixes 8 ounces of cream cheese with 12 ounces of salsa to make a dip for vegetables. She wants to use this mixture to make 48 ounces of dip. How many ounces of cream cheese should she use?
  - $3\frac{1}{3}$  ounces
  - $19\frac{1}{5}$  ounces
  - 32 ounces
  - 72 ounces J
- 11 Ronald has a spinner with 12 equal sections, as shown below.



- Ronald spins the arrow 60 times. Based on theoretical probability, how many times will the arrow land on an even number?
- Α 5
- 15
- C 25
- D 30

$$10.8 - \sqrt{16} + 4\frac{1}{4}$$

- **F** 2.55
- **G** 6.30
- **H** 7.05
- **J** 11.05
- Mr. O'Connor bought 5 large pizzas. After receiving a \$4 discount, he paid a total of \$55 for these pizzas. The equation below can be used to find the original cost p, before the discount, of each pizza.

$$5p - 4 = 55$$

- What is the value of p, in this equation?
- **A** \$10.20
- **B** \$11.80
- **C** \$12.50
- **D** \$15.00

The table below shows corresponding values for t and w.

t	W
-3	11
0	2
3	-7
6	-16

Which equation represents the pattern that the data in the table shows?

**F** 
$$w = 9t + 2$$

**G** 
$$w = 3t + 20$$

**H** 
$$w = -3t + 2$$

$$\mathbf{J}$$
  $w = -9t + 20$ 

- What is the value of  $\frac{3}{4}x \frac{1}{2}y$  when x = 64 and y = 24?
  - Α 60
  - В 36
  - C 14
  - D 12

**Distance Run Last Week** 

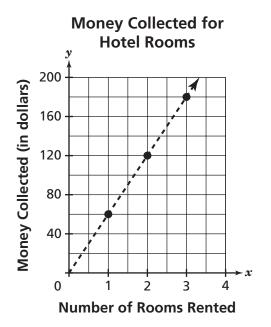
Name	Total Distance (in miles)
Albert	15
Jennifer	17
Lynda	25
Renee	18
Salvador	15

Based on this table, which person ran the distance equal to the median?

- **F** Jennifer
- **G** Lynda
- **H** Renee
- **J** Salvador
- A company puts toys in 3 out of every 50 cereal boxes. Out of 3,000 cereal boxes, how many will contain toys?
  - **A** 20
  - **B** 60
  - **C** 100
  - **D** 180

18

The graph below shows the relationship between the number of rooms rented and the amount of money collected at a hotel.

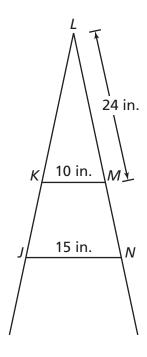


Based on the graph, how many rooms were rented if the hotel collected \$2,400?

- F 40
- G 45
- Н 48
- 60

19

The diagram below represents the side view of a ladder.



Triangle JLN is similar to Triangle KLM. What is the length of  $\overline{MN}$ ?

- **A** 5 inches
- **B** 12 inches
- C 29 inches
- **D** 36 inches

What value of x is the solution to the equation  $\frac{1}{6} = \frac{3}{8}x - \frac{1}{3}$ ?

- **F**  $\frac{1}{12}$
- **G**  $\frac{3}{16}$
- **H**  $\frac{16}{27}$
- J  $\frac{4}{3}$

Which table represents a linear relationship between x and y?

A

X	y
2	5
3	8
6	17
8	23
9	26

В

X	У
2	9
3	6
6	3
9	2
18	1

C

У
4
7
11
16
22

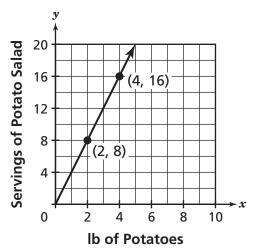
D

<b>X</b>	У
2	5
4	10
6	15
8	20
9	25

22

The graph below shows the relationship between pounds, lb, of potatoes and potato salad servings.





Which statement is supported by the slope of this graph?

- 1 lb of potatoes is needed for 2 servings of potato salad. F
- G 1 lb of potatoes is needed for 4 servings of potato salad
- Н 12 lb of potatoes are needed for 1 serving of potato salad.
- J 12 lb of potatoes are needed for 3 servings of potato salad.

Heath mixes gasoline and oil to make fuel for his motorbike. He adds 16 fluid ounces of oil for

every 2 gallons of gasoline. How many fluid ounces of oil does Heath need to add to

- $3\frac{1}{4}$  gallons of gasoline to make this fuel?
- **A** 14 fluid ounces
- **B**  $17\frac{1}{4}$  fluid ounces
- **C**  $24\frac{1}{4}$  fluid ounces
- **D** 26 fluid ounces

Mr. Garcia's class took a spelling test. The stem-and-leaf plot below shows the number of words each student spelled correctly on the test.

	Stem	Leaf
	1	6 9
Key	2	3 3 5 6 9
2 7 represents 27	3	1223446789
	4	0 0

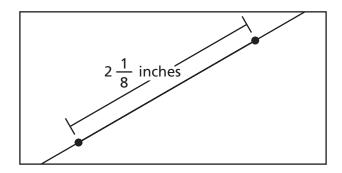
What is the interquartile range of this data set?

- **F** 5
- **G** 12
- **H** 25
- **J** 37

- Sharla drew two similar triangles using a scale factor of  $1\frac{1}{2}$ . The area of the larger triangle is 36 25 square inches. What is the area of the smaller triangle?
  - 12 square inches
  - В 16 square inches
  - 18 square inches
  - D 24 square inches
- 26 The scale on a map is shown below.

$$\frac{1}{4}$$
 inch = 10 miles

Patricia measured the distance between two points on this map, as shown below.



According to the scale shown, what is the actual distance between the two points?

- F 5 miles
- G 19 miles
- 24 miles
- 85 miles

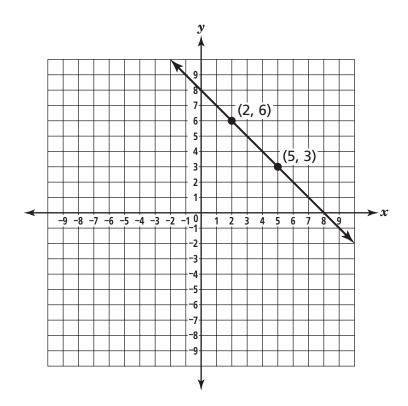
- A story Akira wrote is 99 pages long. The introduction is 3 pages long, and each chapter is 6 pages long. Which equation represents the number of chapters, c, in Akira's story?
  - **A** 3c + 6 = 99
  - **B** 3c 6 = 99
  - **C** 6c + 3 = 99
  - **D** 6c 3 = 99
- What is the value of the expression  $\frac{1}{2}(4.5) + 3 \div \frac{3}{4}$ ?
  - **F** 7
  - **G**  $6\frac{1}{4}$
  - **H** 5
  - **J**  $2\frac{1}{2}$

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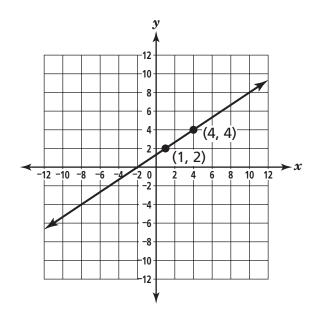


Based on the graph, which equation  $\underline{\text{best}}$  represents the relationship between x and y?

- **A** y = -x + 8
- **B** y = x + 8
- **C** y = x 8
- **D** y = -x 8

- Trang needs to buy cans of soda for a big party. Two 12-packs of soda cost \$5.99. At this rate, how much will it cost Trang to buy 144 cans of soda?
  - **F** \$35.94
  - **G** \$71.88
  - **H** \$125.99
  - **J** \$143.76
- **31** Which inequality is true?
  - **A**  $\frac{7}{12} < 0.8 < \frac{2}{3}$
  - **B**  $\frac{7}{12} < 0.7 < \frac{2}{3}$
  - $C \qquad \frac{7}{12} < 0.6 < \frac{2}{3}$
  - $\mathbf{D} \qquad \frac{7}{12} < 0.5 < \frac{2}{3}$
- A large cylinder has a volume of about 5,400 cubic centimeters. A small cylinder is similar in shape to the large cylinder with a scale factor of  $\frac{2}{3}$ . Which measurement is closest to the volume of the small cylinder?
  - **F** 1,600 cubic centimeters
  - **G** 2,400 cubic centimeters
  - **H** 2,700 cubic centimeters
  - J 3,600 cubic centimeters

- What is the value of  $h \frac{g+5}{6}$  when g = 4 and  $h = 2\frac{2}{9}$ ?
  - **A**  $\frac{13}{3}$
  - **B**  $\frac{11}{3}$
  - **c**  $\frac{13}{18}$
  - **D**  $\frac{11}{18}$
- 34 Sharon owes her mother \$42. She borrows \$18 more from her mother to buy a DVD. Sharon will repay her mother in 4 equal payments. If Sharon has \$12, which statement is true?
  - **F** She has enough money for one payment.
  - **G** She needs \$3 more to make her first payment.
  - **H** She needs \$4 more to make her first payment.
  - **J** She has enough money for two payments.



What value of x makes this equation true when y = -2?

- -5 Α
- 0 В
- C 1
- D 3

F

Which table represents a relationship between x and y that is directly proportional?

Х	у	
2	<u>1</u>	
4	1/8	
6	<u>1</u> 12	
8	<u>1</u> 16	
10	<u>1</u> 20	

		,		
	3	1 <u>5</u> 7		
	6	<u>12</u> 7		
Н	9	<u>9</u> 7		
	12	<u>6</u> 7		
	15	<u>3</u> 7		

X	У
2	7
4	11
6	15
8	19
10	23
	2 4 6 8

Х	У	
3	8	
6 16		
9	24	
12	32	
15	40	

Lila bought some fabric online for \$318. This amount included a \$6 delivery fee and \$12 for each yard of fabric. Which equation can be used to find x, the number of yards of fabric Lila bought?

**A** 
$$12x - 6 = 318$$

**B** 
$$12x + 6 = 318$$

**C** 
$$12(x-6)=318$$

**D** 
$$12(x+6)=318$$

- Jordan read a story in a newspaper about how 26% of households in the United States have one dog as a pet. Which <u>best</u> represents the fraction of households in the United States that have one dog as a pet?
  - **F**  $\frac{13}{50}$
  - **G**  $\frac{13}{37}$
  - **H**  $\frac{13}{32}$
  - J  $\frac{13}{25}$
- Ben is drawing a series of regular polygons. Every side in every polygon is the same length. The table below shows the relationship between the number of sides and the perimeter of the polygon.

### **Regular Polygon Perimeters**

Number of Sides	Perimeter (in centimeters)	
3	21	
5	35	
6	42	
8	56	

Ben will draw a regular polygon with 12 sides that are all the same length as the sides in the other polygons. What will the perimeter of the 12-sided polygon be?

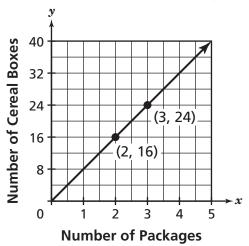
- **A** 63 inches
- **B** 77 inches
- C 84 inches
- **D** 98 inches

An airplane is descending at a rate of 450 feet every 30 seconds. At this rate, which is closest to the number of feet the airplane will descend in 6 minutes?

- **F** 1,350 feet
- **G** 2,250 feet
- **H** 5,400 feet
- **J** 8,100 feet
- 41

A school is buying food packages that contain very small boxes of cereal. The graph below shows the relationship between the number of packages and the number of small cereal boxes.

## **Boxes of Cereal in Packages**



Which statement best describes the slope of this graph?

- **A** The slope of the graph represents the number of small cereal boxes in each package.
- **B** The slope of the graph represents the number of packages of small cereal boxes that the school bought.
- **C** The slope of the graph represents the number of small cereal boxes in the packages that the school bought.
- **D** The slope of the graph represents the number of packages of small cereal boxes that the school uses each week.

Leticia has a stack of 20 cards that are the same size and shape. Each card has a different number from 1 through 20 written on it.

- She will select a card at random.
- She will record the number that is on the card.
- She will replace the card in the stack.
- She will repeat this process 300 times.

Based on theoretical probability, what is the total number of times she should expect to record a number that is odd and a multiple of 3?

- F 15
- G 45
- н 53
- 90
- 43 Amy spent \$42 for 3 gallons of paint and some paintbrushes. Amy spent \$7.50 for the paintbrushes. The equation below can be used to find g, the total cost, in dollars, of each gallon of paint.

$$3g + 7.5 = 42$$

What is g, the total cost of each gallon of paint?

- Α \$5.20
- В \$6.00
- C \$11.50
- D \$16.50

Joseph is mixing vinegar with water to clean his kitchen floor. He should use 1 fluid ounce of vinegar for every  $\frac{1}{2}$  gallon of water. If Joseph fills a bucket with  $4\frac{1}{2}$  gallons of water, exactly how many fluid ounces of vinegar should he use?

- **F** 9 fluid ounces
- **G** 5 fluid ounces
- **H**  $2\frac{2}{5}$  fluid ounces
- **J**  $2\frac{1}{4}$  fluid ounces
- 45

The heights, in inches, of five players on a basketball team are listed below.

73, 79, 76, 74, 73

What is the mean of this data set?

- **A** 73 inches
- **B** 74 inches
- **C** 75 inches
- **D** 76 inches

- What is the value of the expression  $\frac{3}{8} + 0.75(2.2) \frac{2}{5}$ ?

  - $2\frac{3}{40}$
- 47 The lowest land point in Tennessee has an elevation of 178 feet. The lowest point in the United States, Death Valley, has an elevation of -282 feet. Michelle plans to drive from the lowest point in Tennessee to the lowest point in the United States. Which integer best represents the overall change in elevation for Michelle's trip?
  - Α 460 feet
  - 104 feet
  - C -104 feet
  - -460 feet

Х	У
-2	5
0	1
2	-3

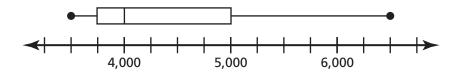
Which equation best represents the relationship between the values of x and y?

- **F** y = -5x 5
- **G** y = -2x + 1
- **H** y = x 5
- **J** y = x + 1
- **49** What value of x makes the equation below true?

$$2\left(\frac{2}{5}x+3\right)=14$$

- **A**  $\frac{10}{3}$
- **B**  $\frac{25}{3}$
- **C** 10
- **D** 25

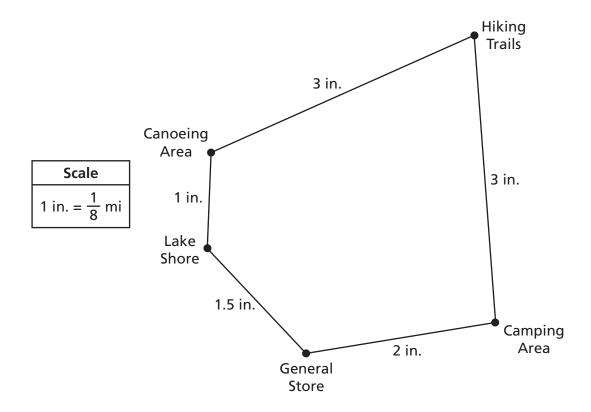
There are 19 people working at a business. The box-and-whisker plot shows information about the monthly salaries of these 19 people.



If each of the 19 people earns a different monthly salary, which statement must be true, based on the box-and-whisker plot?

- F Exactly 4 people earn \$5,000 or more each month.
- G Exactly 5 people earn less than \$3,500 each month.
- Н Exactly 8 people earn less than \$4,000 each month.
- J Exactly 10 people earn \$4,000 or more each month.

The map below shows locations and paths in a state park where Joshua is camping. The scale shown on the map relates inches (in.) to miles (mi).



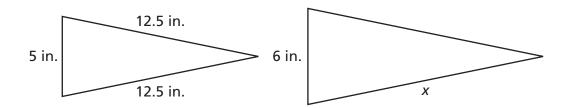
According to the scale, what is the shortest distance that Joshua can walk from the camping area to the canoeing area and then back to the camping area using the trails shown?

- $\mathbf{A} = \frac{9}{16}$  mile
- **B**  $\frac{3}{4}$  mile
- C  $1\frac{1}{8}$  miles
- **D**  $1\frac{1}{2}$  miles

- What is the value of  $(2j) \div (3k)$  when  $j = \frac{3}{4}$  and  $k = \frac{5}{6}$ ? **52** 

  - **G**  $\frac{33}{46}$
  - $3\frac{3}{4}$
  - **J**  $10\frac{13}{24}$
- Which inequality is <u>not</u> true?
  - **A**  $1\frac{3}{4} \le 1.75$
  - **B**  $2\frac{3}{8} \le 2.38$
  - **C**  $3\frac{3}{7} \ge 3.38$
  - **D**  $4\frac{2}{5} \ge 4.52$

**54** Yuri has two flags, shown below.



What is the value of x?

- **F** 12.6 inches
- **G** 13.5 inches
- **H** 14 inches
- J 15 inches

In Leah's art class, 7 students are in the seventh grade, and the other 18 students are in the eighth grade. What percent of the students in Leah's art class are in seventh grade?

- **A** 39%
- **B** 28%
- **C** 25%
- **D** 11%

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# Science



## Part 1

A student has a mineral but does not know which mineral it is. The student wants to find out this information. To find out, the student can use the Mohs hardness scale. The student also has a piece of plastic, a copper coin, a glass plate and a steel file.

#### **Mohs Hardness Scale**

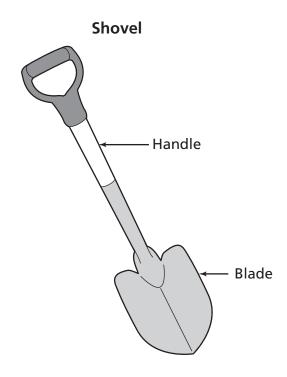
Mineral	Hardness	]
Talc	1	← Piece of plastic, 1
Gypsum	2	Fingerneil 2 F
Calcite	3	← Fingernail, 2.5
Fluorite	4	Connor soin 45
Apatite	5	Class plate 5 5
Orthoclase	6	Glass plate, 5.5
Quartz	7	← Steel file, 6.5
Topaz	8	
Corundum	9	
Diamond	10	

#### Using Mohs hardess scale, which result says the mineral is apatite?

- **A** The mineral can be scratched by both a fingernail and a piece of plastic.
- **B** The mineral can be scratched by a glass plate, but not by a copper coin.
- **C** The mineral can be scratched by a steel file but not by a glass plate.
- **D** The mineral can be scratched by both a copper coin and a glass plate.

## Which is a function of the nucleolus of a cell?

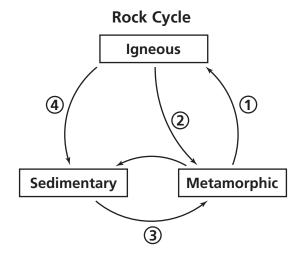
- **F** producing ribosomes
- **G** forming lysosomes
- **H** digesting proteins
- **J** packaging wastes
- A shovel is shown below. A shovel is made up of two different simple machines.



The blade of the shovel acts as one type of machine as it separates soil when it enters the ground. The handle of the shovel acts as a second type of machine when the person using it lifts the soil. What two simple machines make up a shovel?

- **A** pulley and wedge
- **B** screw and inclined plane
- **C** lever and pulley
- **D** wedge and lever

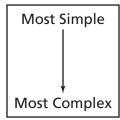
This is a rock cycle. The arrows are processes that change one type of rock into another type of rock.



Which arrow most likely includes weathering?

- F 1
- 2 G
- Н 3
- J 4

A student is making a chart of different levels of organization in the body of an organism.



1	
2	
3	
4	

## Which term belongs in Level 1?

- **A** Heart Muscle
- **B** Circulatory System
- **C** Blood Cell
- **D** Cardiac Muscle Tissue

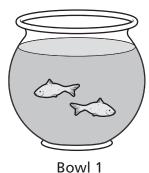
A student uses a lever to apply a 20-newton force to a box while moving the box a distance of 0.5 meter.

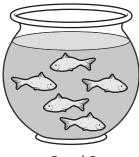
$$Work(w) = Force(F) \times Distance(d)$$

How much work did the student do while moving the box?

- **F** 10 joules
- **G** 40 joules
- **H** 100 joules
- **J** 400 joules

Students plan to find out if goldfish grow larger when fewer fish live in a bowl. Students will measure the lengths of seven goldfish. They will put two goldfish in Bowl 1 and five goldfish in Bowl 2.

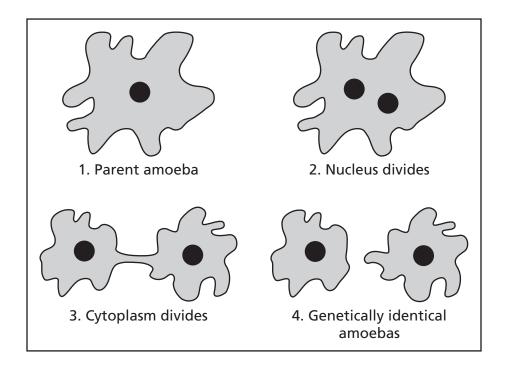




Bowl 2

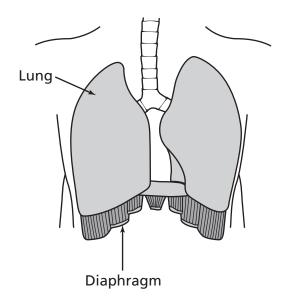
The students will feed the fish the same amount of food. They will keep the water conditions the same. After six months, the students will measure the lengths of all the fish and compare them. The students are looking for one thing to change in the bowls as the result of the other things. What is that one thing?

- Α lengths of the fish
- number of fish per bowl
- C amount of food per fish
- D condition of the water



### What term best describes this process?

- **F** incomplete metamorphosis
- **G** fertilization
- **H** asexual reproduction
- **J** diffusion
- 9 Small rock particles roll downhill into rivers and oceans and eventually become cemented together. This cemented material forms
  - **A** igneous rock.
  - **B** metamorphic rock.
  - **C** molten rock.
  - **D** sedimentary rock.



Which two body systems work together when the diaphragm contracts and relaxes, causing air to move in and out of the lungs?

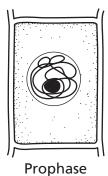
- F muscular and respiratory
- G circulatory and digestive
- Н nervous and immune
- J excretory and skeletal

$$|\mathsf{Distance}(d) = \mathsf{Rate}(r) \times \mathsf{Time}(t)|$$

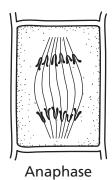
#### What distance did the train travel?

- **A** 12 kilometers
- **B** 20 kilometers
- **C** 110 kilometers
- **D** 1,200 kilometers
- 12 The thinnest layer of Earth is between 7 and 70 kilometers thick. Which layer is it?
  - F crust
  - **G** mantle
  - **H** outer core
  - J inner core

13 The diagrams below represent three stages of plant cell division.





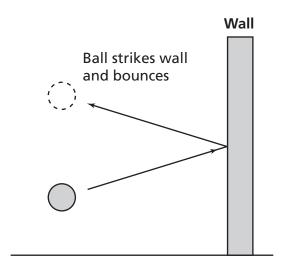


# What occurs in the next stage of plant cell division?

- Α Sister chromatids become visible.
- В Sister chromatids separate.
- C The chromosomes move to the middle of the cell.
- D A cell plate forms in the middle of the cell.
- 14 Which set of tools is best to observe the different stages of plant cell division?
  - F test tube and distilled water
  - G petri dish and metric ruler
  - Н hot plate and Erlenmeyer flask
  - J light microscope and slides

# 15 What part of a flower produces female reproductive cells?

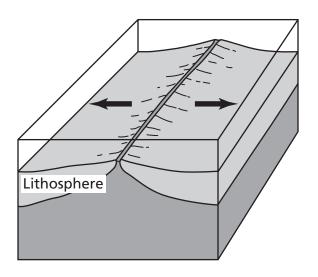
- **A** anther
- **B** ovary
- **C** sepal
- **D** filament
- 16 A student throws a ball against a wall as shown in the picture below.



## Which statement <u>best</u> explains what is happening in the picture?

- **F** The energy of the ball is destroyed as it strikes the wall.
- **G** The energy of the ball becomes negative as it strikes the wall.
- **H** The force from the wall on the ball is equal and opposite to the force from the ball on the wall.
- **J** The force exerted by the wall on the ball is greater than the force exerted by the ball on the wall.

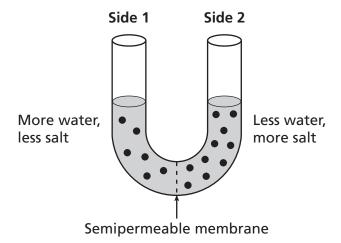
Here are two lithospheric plates moving away from each other.



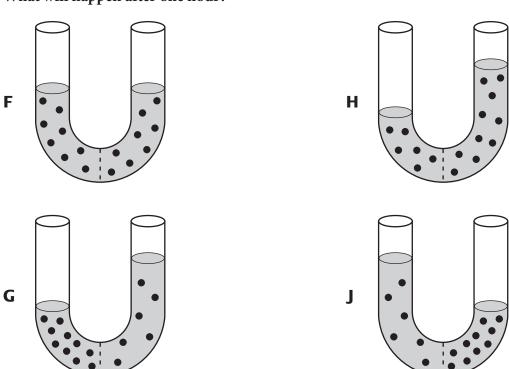
## How much do the plates probably move?

- Α 50 kilometers per year
- В 5 kilometers per year
- C 50 meters per year
- D 5 centimeters per year

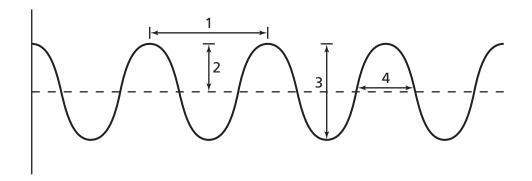
Here is a tube with two sides. In between is a semipermeable membrane. Water can pass across the membrane but the salt cannot.



## What will happen after one hour?

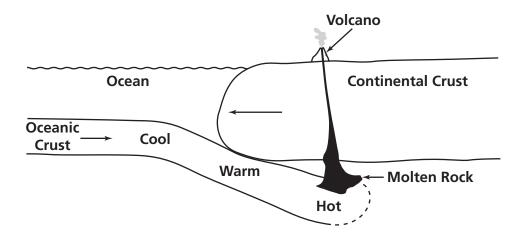


The diagram below shows a wave.



Which label represents the wavelength?

- **A** 1
- **B** 2
- **C** 3
- **D** 4



#### The volcano formed because

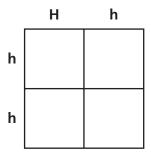
- **F** one tectonic plate melted as it moved beneath another.
- **G** there was a lack of ocean water over the continental crust.
- **H** high tide changed to low tide along the coast line.
- **J** there was difference in thickness between two tectonic plates.

# 21 A brother has brown eyes but his sister has blue eyes. Why?

- **A** They got a different number of chromosomes for eye color.
- **B** The brother got traits only from their father, and his sister got traits only from their mother.
- **C** They each got a different combination of genetic information from their parents.
- **D** The brother got fewer genes from his mother than his sister got.

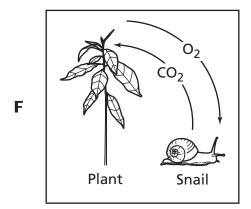
- Which substance is a product of photosynthesis and is used as a reactant in respiration?
  - **F** water (H<sub>2</sub>O)
  - **G** carbon dioxide (CO<sub>2</sub>)
  - **H** oxygen  $(O_2)$
  - **J** hydrogen  $(H_2)$
- Which of these best describes an electromagnetic wave?
  - **A** An electromagnetic wave is transverse and can travel through a vacuum.
  - **B** An electromagnetic wave is longitudinal and can only travel through solids.
  - **C** An electromagnetic wave is transverse and can only travel through solids.
  - **D** An electromagnetic wave is longitudinal and can travel through a vacuum.
- Human use of chemicals containing chlorofluorocarbons (CFCs) has contributed to a thinning of the ozone layer in the atmosphere. The ozone layer absorbs ultraviolet radiation from the sun. Which best describes a negative consequence of the thinning of the ozone layer?
  - **F** too many nutrients are available in oceans
  - **G** animal cells have become damaged
  - **H** less light is available for plant growth
  - **J** less precipitation happens in rain forests

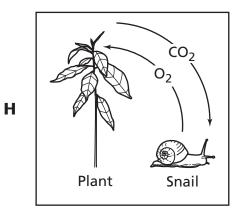
In a certain breed of dog, short hair (H) is dominant to long hair (h). A short-haired dog (Hh) is crossed with a long-haired dog (hh). A Punnett square of this cross is shown below.

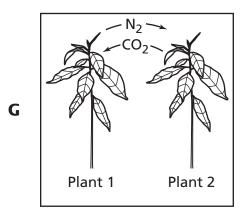


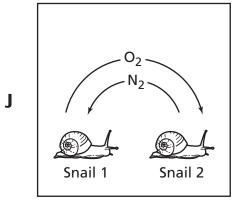
What is the probability that one of the puppies produced by these parents will have short hair?

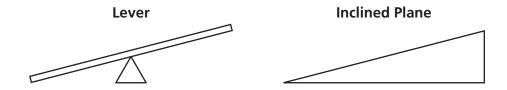
- **A** 0%
- **B** 25%
- **C** 50%
- **D** 100%











Which of these best describes a function of these simple machines?

- **A** They both can overcome friction with a rolling motion.
- **B** They both can secure two parts of an object together.
- **C** They both can separate two parts of an object.
- **D** They both can help raise objects from the ground.
- A student has an unidentified mineral sample. The mineral is gray and leaves a white streak. The student could scratch the mineral with a copper coin that has a hardness of 3.5, but not with a fingernail that has a hardness of 2.5.

#### **Mineral Information**

Name	Common Colors	Streak	Mohs Hardness
Graphite	Silver, gray, black	Gray	2
Talc	White, yellow, gray, green	White	1
Orthoclase	White, pink	White	6
Calcite	Clear, white, gray, brown, yellow, orange, pink, blue, green	White	3

Based on the information in the table, which mineral does the student have?

- **F** Graphite
- **G** Talc
- **H** Orthoclase
- **J** Calcite

## Which statement about sexual reproduction is correct?

- **A** Two gametes combine during sexual reproduction.
- **B** Sexual reproduction is only used by organisms in the animal kingdom.
- **C** An organism divides into two equal parts during sexual reproduction.
- **D** Sexual reproduction is only used by single-cell organisms.

# Engineers plan to develop a new drill for use on oil rigs. What should the engineers do first in order to develop the new drill?

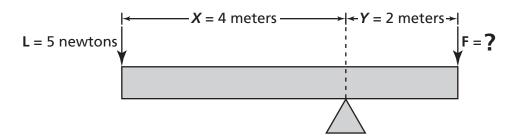
- **F** conduct research on features for the new drill
- **G** build a prototype of the new drill
- **H** determine the materials needed to build the new drill
- **J** design a computer model of the new drill

# **31** Which of these best describes the function of the Golgi apparatus in a cell?

- **A** converting oxygen and nutrients into energy for the cell
- **B** modifying proteins and fats and preparing them to be moved out of the cell
- **C** breaking down cellular waste products and moving them to the cytoplasm
- **D** regulating the passage of molecules in and out of the cell

32

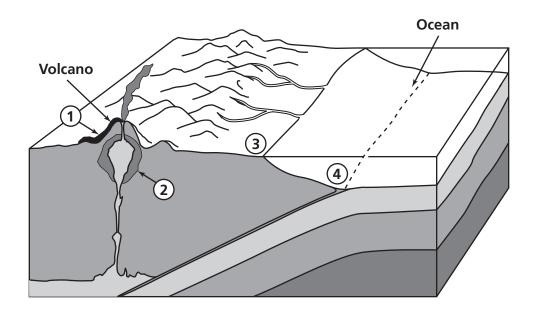
A lever does work. In this picture, a load (L) of 5 newtons is used at one end.



$$\mathsf{F} = \frac{(\mathsf{L} \times \mathsf{X})}{\mathsf{Y}}$$

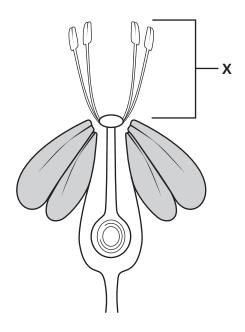
Using the formula, what force (F) is required to make the lever balanced?

- **F** 5 newtons
- **G** 10 newtons
- **H** 20 newtons
- J 40 newtons



Which number shows the most likely location of metamorphic rock?

- **A** 1
- **B** 2
- **C** 3
- **D** 4



#### What structure is represented by X?

- **F** ovary
- **G** pistil
- **H** stigma
- **J** stamen
- Engineers make a new material for buildings. When the material has enough force pushed against it, it turns red. This means the material is about to break. When would the new material be most useful?
  - **A** In a laboratory test, the material fails to change color.
  - **B** At a construction site, the color change allows workers to move to a safe area.
  - **C** When used in a building, the material changes colors in different levels of light.
  - **D** When used in a bridge, the material remains for a long time without changing color.



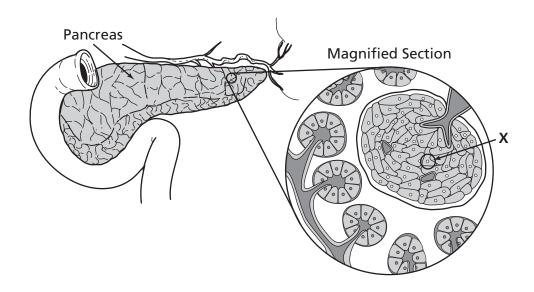
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**36** The diagram below represents some levels of organization within the pancreas.



Which level of organization is represented by X?

- **F** cell
- **G** organ
- **H** tissue
- **J** organ system
- Under certain conditions, shale can form into a metamorphic rock called slate. Which conditions will cause shale to transform into slate?
  - A cooling and hardening of magma
  - **B** application of heat and pressure
  - **C** transportation and deposition of sediments
  - **D** weathering and erosion of rocks

**38** A ball traveled 35 meters at a speed of 5 meters per second.

$$Time = \frac{Distance}{speed}$$
$$t = \frac{d}{s}$$

How long did it take the ball to travel the 35 meters?

- **F** 7 seconds
- **G** 30 seconds
- **H** 40 seconds
- J 175 seconds
- Which system supports the body, protects the organs, and allows for movement?
  - **A** skeletal
  - **B** circulatory
  - **C** excretory
  - **D** reproductive
- 40 Which layer of Earth is composed of dense, liquid iron?
  - F crust
  - **G** mantle
  - **H** outer core
  - **J** inner core

- Having freckles (F) is dominant to not having freckles (f). Both parents have freckles, and they have a child who does not have freckles (ff). Which genes must the parents have?
  - A FF and FF
  - **B** FF and Ff
  - **C** FF and ff
  - **D** Ff and Ff
- A blood cell is placed in a salt solution that has twice the salt concentration of normal blood plasma. Which of these will most likely happen to the blood cell?
  - **F** The blood cell will shrink as water moves out through the cell membrane.
  - **G** The blood cell will expand as water enters through the cell membrane.
  - **H** The blood cell will expand as salt enters through the cell membrane.
  - **J** The blood cell will shrink as salt moves out through the cell membrane.
- Devices for communicating with satellites are put on the outside edges of continents. Two devices are placed on a continent. One device is on one lithospheric plate and the second is on another lithospheric plate. The two plates are moving apart. How far apart will the communication devices probably move away from each other in 10 years?
  - **A** 1 centimeter
  - **B** 100 centimeters
  - C 100 meters
  - **D** 1 kilometer

- Object X has twice the mass of Object Y. Both objects are accelerating at the same rate. Which statement best describes the motions of Object X and Object Y?
  - **F** Object X is traveling at twice the speed as Object Y.
  - **G** Object X is traveling at half the speed as Object Y.
  - **H** Object X requires twice the force to accelerate at the same rate as Object Y.
  - **J** Object X requires half the force to accelerate at the same rate as Object Y.

**Books Read** over Summer

Student	Number of Books
Lauren	7
Paul	9
Kim	4
Seth	5

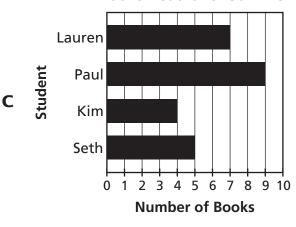
Which of these best displays the data from the table?

#### **Books Read over Summer**

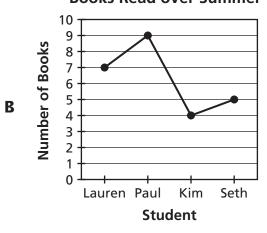
A Seth Paul

Kim

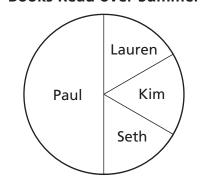
**Books Read over Summer** 



**Books Read over Summer** 



**Books Read over Summer** 



D

- Cellular respiration allows animals to use energy from glucose. What is one thing cellular respiration makes?
  - **F** oxygen
  - **G** light
  - **H** water
  - **J** carbon
- In some rabbits, black fur (B) is dominant to brown fur (b). This shows what may happen if two black rabbits have babies.

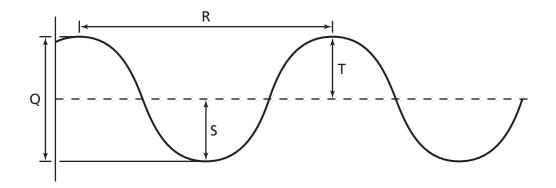
	В	b
В		
b		

What fur color will the babies likely have?

- **A** 50% brown fur, 50% black fur
- **B** 75% black fur, 25% brown fur
- **C** 100% brown fur, 0% black fur
- **D** 100% black fur, 0% brown fur
- 48 What will form when two continental plates crash into each other?
  - **F** desert
  - **G** beach
  - **H** mountain range
  - **J** deep trench

# 49

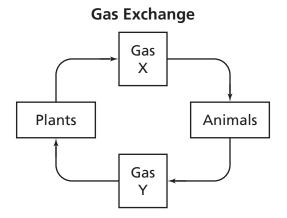
The diagram below shows a transverse wave.



Which equation applies to this transverse wave?

- $\mathbf{A} \quad R = Q + S$
- $\textbf{B} \qquad R = Q T$
- $\textbf{C} \qquad Q = S + T$
- $\textbf{D} \quad Q = R \, T$

**50** The diagram shows how plants and animals exchange gases.



What type of gas is represented by Gas Y?

- **F** oxygen, O<sub>2</sub>
- **G** nitrogen, N<sub>2</sub>
- **H** methane, CH<sub>4</sub>
- J carbon dioxide, CO<sub>2</sub>

# **51** Which example best describes asexual reproduction?

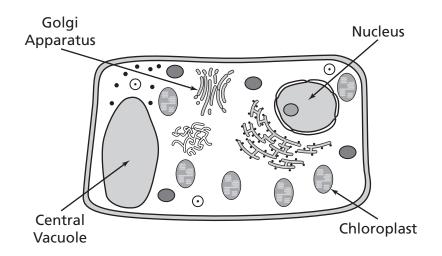
- **A** An amphibian fertilizes eggs floating on water to produce tadpoles.
- **B** A male flower on one tree pollinates a female flower on another tree and produces seeds.
- **C** A runner from the roots of a parent plant produces genetically identical daughter plants.
- **D** A gamete from one fungus fuses with the gamete of another fungus and produces a zygote.

# **52** Plastic is made from oil. When we recycle plastic, this causes

- **F** an increase in the amount of fuel used in cars.
- **G** an increase in the amount of pollution in the oceans.
- **H** a reduction in the amount of waste in landfills.
- **J** a reduction in the amount of carbon dioxide in the atmosphere.

# **53** Which statement correctly identifies a sound wave?

- **A** A sound wave is a transverse wave.
- **B** A sound wave is a longitudinal wave.
- **C** A sound wave can travel through a vacuum.
- **D** A sound wave can produce a magnetic field.



#### In which organelle does photosynthesis take place?

- **F** Golgi Apparatus
- **G** Nucleus
- **H** Chloroplast
- J Central Vacuole

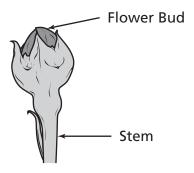
Students want to know if sugar makes a difference on the boiling point of water. The students add different amounts of sugar to 1 liter of water. Here is their data.

# Effect of Sugar on the Boiling Point of Water

Mass of Sugar Added (grams)	Boiling Point (°C)
0	100.0
180	100.5
360	101.0
540	101.5
720	102.0
900	102.5

#### Based on the data, which statement shows cause and effect?

- **A** Water with added sugar comes to a boil more quickly than water without any added sugar.
- **B** Higher water temperatures cause greater amounts of sugar to dissolve in the water.
- **C** One liter of water at 102.5°C causes 900 grams of sugar to dissolve.
- **D** Every 180 grams of sugar added to a liter of water causes the boiling point to increase by 0.5°C.



What part of the flower surrounds and protects the bud?

- **F** stamens
- **G** anthers
- **H** petals
- **J** sepals

**Mohs Hardness Scale** 

Mineral	Hardness	
Talc	1	
Gypsum	2	r Fingerneil 2 F
Calcite	3	Fingernail, 2.5
Fluorite	4	
Apatite	5	Window Class F.F.
Orthoclase	6	← Window Glass, 5.5
Quartz	7	
Topaz	8	
Corundum	9	
Diamond	10	

Which mineral can be scratched by both a fingernail and window glass?

- **A** Gypsum
- **B** Fluorite
- **C** Topaz
- **D** Diamond

A car is traveling forward at an initial velocity of 10 meters per second. The car then accelerates forward at a rate of  $\frac{1}{2}$  meter per second<sup>2</sup> for 20 seconds.

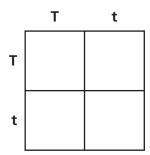
$$V_f = V_i + at$$

$$Velocity(final) = velocity(initial) + acceleration \times time$$

#### What is the final velocity of the car?

- **F** 10 meters per second
- **G** 20 meters per second
- **H** 25 meters per second
- J 30 meters per second
- **59** One of the functions of the circulatory system is to
  - **A** send signals throughout the body.
  - **B** carry oxygen and nutrients to body cells.
  - **C** protect the body from microorganisms.
  - **D** provide strength and support to the body.
- Ethanol is made from corn and can be used as gas for a car. Which of these might be a bad result of using ethanol as gas?
  - **F** reducing consumers' need for fossil fuels
  - **G** increasing the number of jobs available in agriculture
  - **H** increasing the demand for corn that leads to a rise in food prices
  - J reducing the amount of gases that could harm the environment

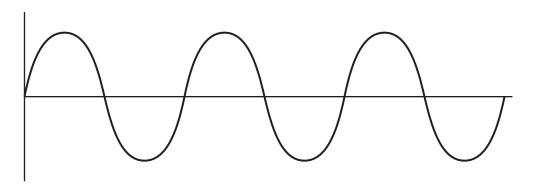
In humans, the trait for straight thumbs (T) is dominant to the trait for double-jointed thumbs (t). The Punnett square below shows a cross between two parents with straight thumbs.



The probability that an offspring of this cross will have double-jointed thumbs is

- **A** 1 out of 4.
- **B** 2 out of 4.
- **C** 3 out of 4.
- **D** 4 out of 4.
- Which of these begins the process that changes metamorphic rock into sedimentary rock?
  - **F** cooling and crystallization
  - **G** heating and pressure
  - **H** folding and burial
  - J weathering and erosion

**63** This is a transverse wave.



Which word is the distance between two high points that are next to each other?

- **A** amplitude
- **B** frequency
- **C** wavelength
- **D** equilibrium
- **64** Which statement best describes particle movement during simple diffusion?
  - **F** Particles move out of a cell when the cell becomes full.
  - **G** Particles move in and out of a cell at a constant rate.
  - **H** Particles move from an area of high concentration to an area of low concentration.
  - **J** Particles move in a way that keeps them as close to each other as possible.

<b>65</b>	Which is the best example of an assistive technology that was designed to help a person overcome
	a disability?

- A a mobile telephone with a ringer that can be turned off
- **B** a computer with a magnifier over the screen
- **C** a type of plant that is made to resist pests
- **D** a new type of fuel made from algae
- Which of these is a female flower part that helps pollen reach the ovule?
  - **F** pistil
  - **G** stamen
  - **H** anther
  - J petal
- 67 The thickest layer of Earth contains about 80% of the volume of Earth. What is this layer?
  - **A** inner core
  - **B** outer core
  - **C** mantle
  - **D** crust

What is the main difference between transverse and longitudinal waves?

- **F** Only transverse waves make sound.
- **G** Only longitudinal waves can move through a solid.
- **H** Only transverse waves have particles that move straight up or down to the direction the wave moves.
- **J** Only longitudinal waves have particles that travel in circles along the path of the wave.

**69** What is the correct chemical equation for photosynthesis?

- **A**  $6CO_2 + 6H_2O \longrightarrow C_6H_{12}O_6 + 6O_2$
- $\mathbf{B} \quad 6\mathrm{CO}_2 + \mathrm{C}_6\mathrm{H}_{12}\mathrm{O}_6 \longrightarrow 6\mathrm{H}_2\mathrm{O} + 6\mathrm{O}_2$
- **C**  $6CO_2 + 6O_2 \longrightarrow C_6H_{12}O_6 + 6H_2O$
- $\mathbf{D} \quad \mathrm{C_6H_{12}O_6} + 6\mathrm{H_2O} \longrightarrow 6\mathrm{CO_2} + 6\mathrm{O_2}$

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# **Social Studies**



# Part 1

**1** Study the information below.

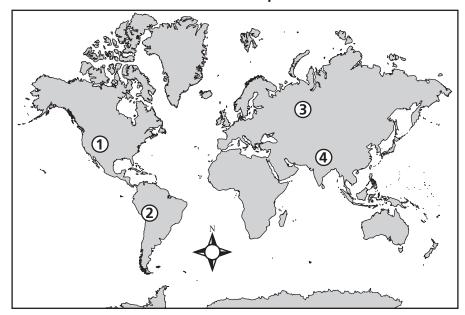
?

Common practices of people of the same cultural group

#### This information defines

- **A** regional customs.
- **B** environmental issues.
- **C** population distribution.
- **D** economic development.
- Which element of a map shows directions in relation to landforms?
  - **F** compass rose
  - **G** scale
  - **H** legend
  - l contour line

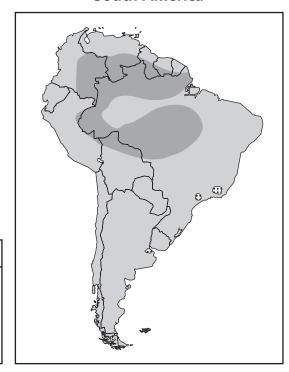
### **World Map**

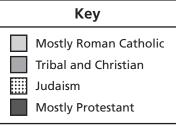


Which pair correctly matches a mountain range and its location on the map?

- **A** 1 Andes
- **B** 2 Urals
- **C** 3 Rockies
- **D** 4 Himalayas

#### **South America**





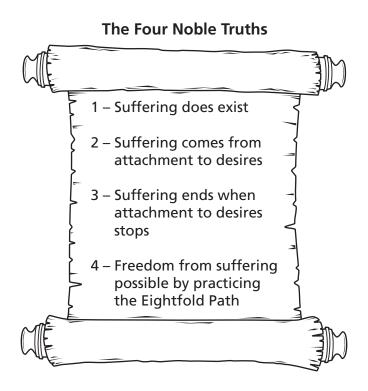
Which religion is most common in South America according to this map?

- **F** Roman Catholic
- **G** Tribal and Christian
- **H** Judaism
- **J** Protestant

Rule by the People	Rule by Self-Chosen
through Elections	Leader
Representative Democracy	?

Which type of government would best complete the table?

- **A** Autocracy
- **B** Confederacy
- **C** Anarchy
- **D** Oligarchy



#### Which religion includes the beliefs described?

- **F** Judaism
- **G** Buddhism
- **H** Christianity
- **J** Islam

# Population \_\_\_\_?

The increase in a country's population during a period of time

#### This information defines

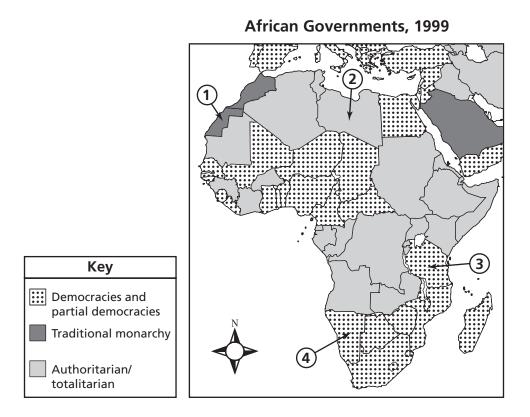
- **A** life expectancy.
- **B** density.
- **C** growth rate.
- **D** distribution.

### Memphis, Tennessee



#### Which river is shown in the photograph?

- **F** Mississippi River
- **G** Duck River
- **H** Holston River
- J Cumberland River

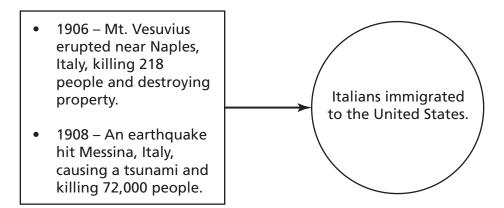


Which area on the map is most likely ruled by a king or a queen?

- **A** 1
- **B** 2
- **C** 3
- **D** 4

- Which is most likely to result from an increase in immigration and cultural globalization during the 21st century?
  - **F** higher rural income tax rates
  - **G** a need for respect for religious differences
  - **H** reduced interest in technology
  - J a slower rate of social change
- 11 Which feature of East Tennessee supports the most varied types of wildlife?
  - **A** heavily forested mountains
  - **B** densely populated urban areas
  - **C** broad river valleys
  - **D** man-made reservoirs

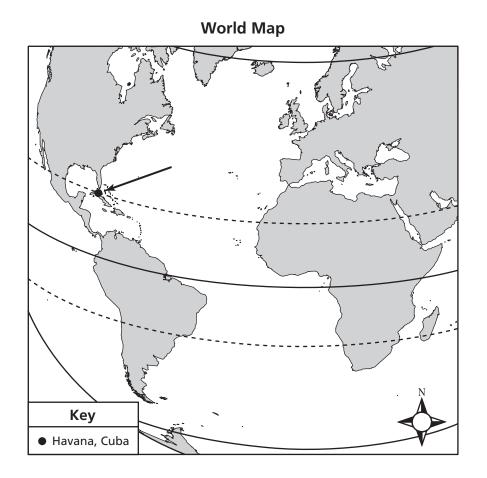
# 12 Study the diagram below.



#### Which conclusion can be drawn based on the information in the diagram?

- **F** Natural disasters contributed to migration to the U.S.
- **G** Italians were the largest immigrant group in the U.S.
- **H** Political negotiations encouraged people to emigrate to the U.S.
- **J** Italian immigrants settled in the southern cities of the U.S.
- 13 Which demographic concept analyzes the numbers of births and deaths in a specific area?
  - **A** population density
  - **B** growth rate
  - **C** population distribution
  - **D** family size

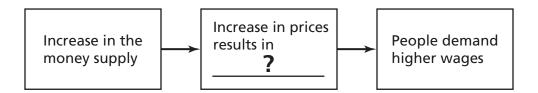
#### 14



#### Which line of latitude is closest to Havana, Cuba, on the map?

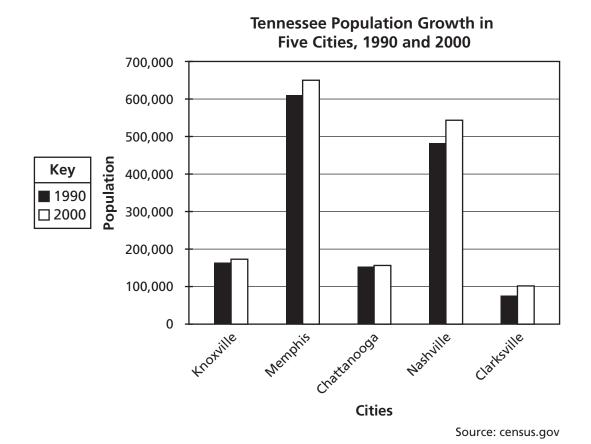
- **F** Tropic of Cancer
- **G** the Equator
- **H** Arctic Circle
- J Tropic of Capricorn

# 15 Study the diagram below.



#### Which economic term best completes this diagram?

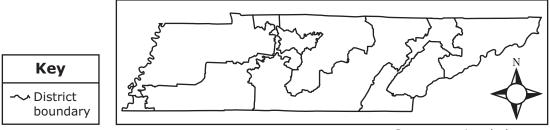
- **A** inflation
- **B** scarcity
- **C** rationing
- **D** specialization
- Which condition <u>most</u> likely will occur due to rising amounts of greenhouse gases in the atmosphere?
  - **F** an increase in global warming alerts
  - **G** a decrease in tectonic plate movement
  - **H** a stabilization of weather patterns
  - **J** an expansion of the polar ice caps



Which city on the graph had the <u>least</u> change in the number of residents between 1990 and 2000?

- **A** Memphis
- **B** Chattanooga
- **C** Nashville
- **D** Clarksville

# **Tennessee Congressional Districts**

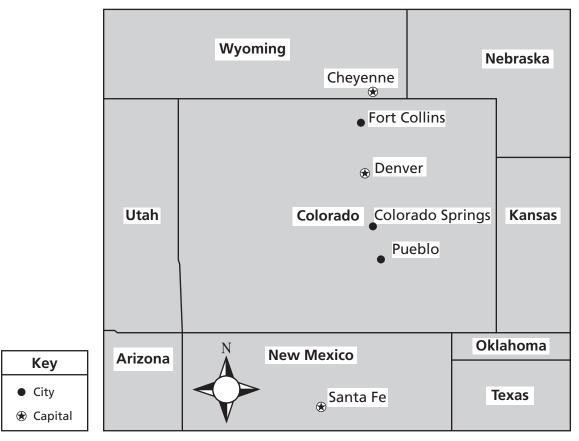


Source: nationalatlas.gov

## A change in the boundaries outlined on the map would be the result of

- **F** a request by the president.
- **G** an order by the governor.
- **H** a shift in the state population.
- **J** an election in the state senate.

## **Colorado and Surrounding States**



## What type of map is shown?

- **A** political
- **B** elevation
- **C** climate
- **D** resource

# **20** Which mountain range forms one boundary of the Amazon River Basin?

- F Himalayas
- **G** Andes
- **H** Alps
- **J** Rockies

# 21 Study the excerpt below.

One billion people, or one third of the world's population, is estimated to be living in either slum or squatter settlements. The largest proportion of population living in slums in the world is in the Asian region, which is also urbanizing at the fastest rate. In 2001, Asia had 554 million slum dwellers, or 60% of the world's total.

— The New York Academy of Medicine, 2007

#### Which statement is supported by the excerpt?

- **A** Asian cities represent the smallest percentage of slum dwellers.
- **B** Most Asian businesses avoid moving to areas with large urban populations.
- **C** Citizens living in urban areas most likely emigrated from rural areas in Asia.
- **D** Many urban residents in Asia have an unsatisfactory standard of living.

# Which question would help determine whether a resource is renewable?

- **F** How easy is it to reuse the resource?
- **G** Can the resource be easily acquired?
- **H** Can the resource be naturally replaced?
- **J** Is the resource available in large quantities?

Life Expectancy of Literate People in India, 2005

	Rural		Urban	
State	Male	Female	Male	Female
Orissa	38.2	24.3	52.4	42.2
Kerala	62.2	59.5	61.3	62.9
Gujarat	41.0	27.0	53.8	44.9
Tamil Nadu	46.1	32.5	55.0	47.9
Himachal Pradesh	49.7	35.5	57.2	51.0
Bihar	33.4	14.5	44.2	28.6
National Average	38.3	22.9	52.8	42.7

Source: National Family Health Survey-3, India

# Which factor <u>best</u> explains the difference between the life expectancy rates of literate people in the chart?

- **A** Rural communities often lack access to health care and education.
- **B** Urban communities rarely receive funding to build new hospitals.
- **C** Increased population density often creates a lower quality of life in urban areas.
- **D** Increased scarcity of resources causes a decline in rural standards of living.

# Study the list below.

- Dense populationCommercial hub
- Cultural center

# Which type of community is best described by the list?

- F urban
- suburban G
- global
- rural

# Great Basin Rocky Mountains and Plateaus Pacific Coast Appalachian Mountains Appalachian Mountains Appalachian Mountains Appalachian Mountains Appalachian Mountains Appalachian Mountains Adams Appalachian Mountains Atlantic Coastal Plains

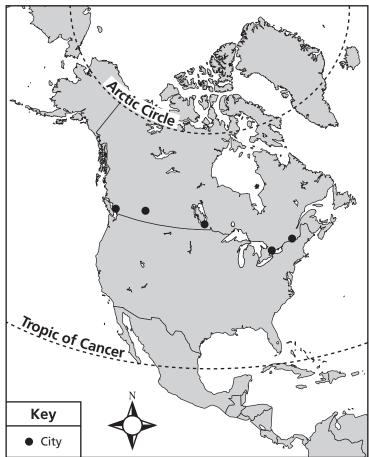
## **Regions of the Continental United States**

Source: Arizona Geographic Alliance

#### Which characteristics define the regions on the map?

- **A** population densities
- **B** religious beliefs
- **C** geographic features
- **D** economic issues

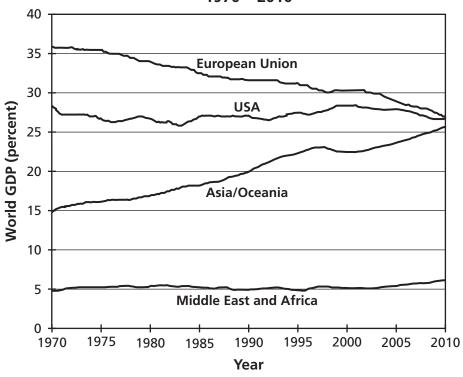




A majority of Canadian cities are located near the United States border. Which reason does the map support to best explain this?

- **F** desire to maintain foreign culture
- **G** probable success of commercial fishing
- **H** ability to acquire a college education
- **J** comparative mildness of weather conditions

Share of World Gross Domestic Product (GDP) by Region 1970 – 2010



Source: World Bank

## Which conclusion is most accurate based on the graph?

- **A** The GDP of the Middle East and Africa began to increase after 1990.
- **B** Many European nations increased trade after 1990.
- **C** The GDP in the United States varied greatly after 1970.
- **D** Many countries in Asia/Oceania experienced economic expansion after 1970.

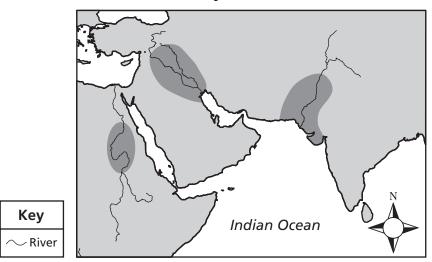
## 28

The World Bank provides \$22 million to revitalize Afghanistan's private sector development. These markets are run by private individuals or groups.

#### Which goal of the World Bank is best supported by this information?

- **F** to oppose international trade monopolies
- **G** to limit government interference
- **H** to promote economic growth
- J to guarantee fair labor practices

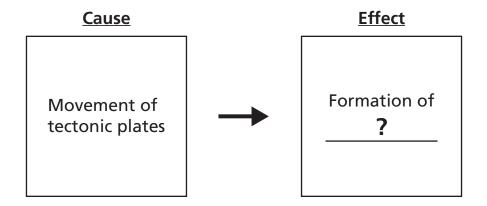
# **Early Civilizations**



## Why did early civilizations settle in the darker-shaded area on this map?

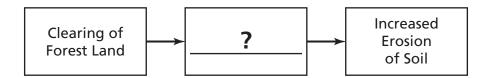
- **A** to have access to better hunting grounds
- **B** to reduce the effects of natural disasters
- **C** to have access to fertile farming lands
- **D** to limit the number of foreign invasions

# **30** Study the diagram below.



## Which geographic feature best completes the diagram?

- **F** glaciers
- **G** river deltas
- **H** mountain ranges
- **J** peninsulas
- **31** Study the flow chart below.



# Which phrase best completes the flow chart?

- A Heightened Tectonic Activity
- **B** Increased Levels of Humidity
- **C** Reduced Exposure to Intense Sunlight
- **D** Increased Exposure to the Wind

#### Actions of Benito Mussolini from 1925-1943

- Outlawed opposition political parties
- Replaced the royal guard with personal army and secret police
- Gained absolute control over Italy

#### Which term best summarizes the government described?

- **F** dictatorship
- **G** socialist
- **H** oligarchy
- **J** monarchy

# **33** Study the passage below.

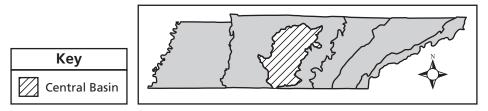
Gentrification is often defined as the transformation of neighborhoods from low value to high value. This change has the potential to cause displacement of long-time residents and businesses. Displacement happens when long-time or original neighborhood residents move from a gentrified area because of higher rents, mortgages, and property taxes.

Centers for Disease Control and Prevention

## What is one effect of the process described in the passage?

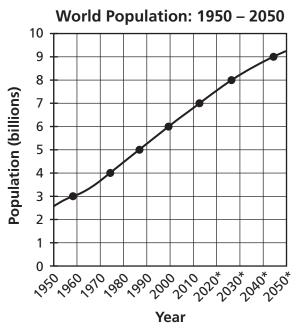
- **A** Community neighborhoods remain stable.
- **B** Residents native to the area are forced to relocate.
- **C** Economic growth decreases property value.
- **D** Local rental rates remain constant.

# The Six Physical Regions of Tennessee



# Which region surrounds the Central Basin on the map?

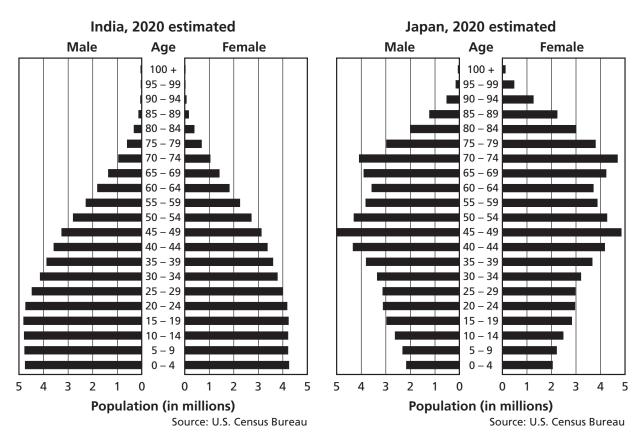
- **F** Gulf Coastal Plain
- **G** Unaka Mountains
- **H** Highland Rim
- **J** Cumberland Plateau



\* estimated Source: U.S. Census Bureau

#### What is one possible effect of the trend shown on the graph?

- **A** Food prices will decline.
- **B** Service industries will be reduced.
- **C** Land prices will decrease.
- **D** Agricultural land will be lost.

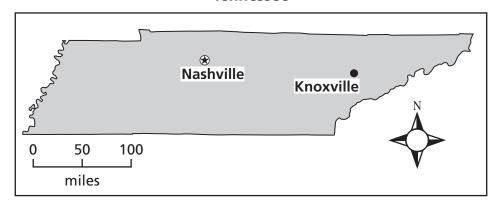


In which area is Japan <u>most</u> likely to spend more money than India based on information from these population <u>pyramids</u>?

- **F** school construction
- **G** childcare
- **H** elderly health care
- **J** office construction

# **37**

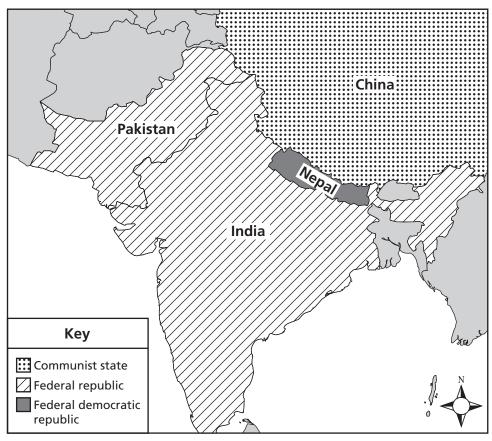
## Tennessee



What is the approximate distance between Nashville and Knoxville according to this map?

- **A** 100 miles
- **B** 150 miles
- **C** 200 miles
- **D** 250 miles





Source: CIA World Factbook

Which country on the map gives citizens the fewest personal freedoms?

- **F** Pakistan
- **G** India
- **H** Nepal
- **J** China

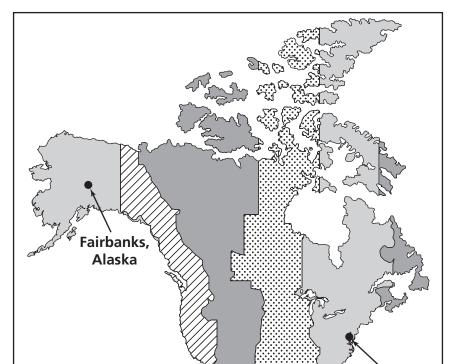
# **39**

## Study the information below.

- What goods should be produced?
- How will goods be distributed?
- Who will purchase the goods and services?

## Which term outlines the answers to the questions above?

- **A** economic system
- **B** federal budget
- **C** state laws
- **D** political system



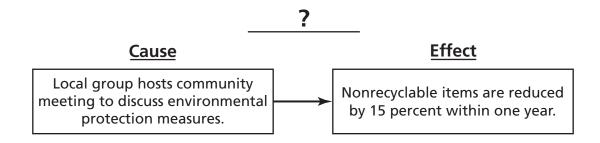
New York City,
New York

# **Time Zones of North America**

What is the time in Fairbanks, Alaska, when it is 1:00 P.M. in New York, New York?

- **F** 9:00 A.M.
- **G** 10:00 A.M.
- **H** 4:00 P.M.
- **J** 5:00 P.M.

# 41 Study the diagram below.

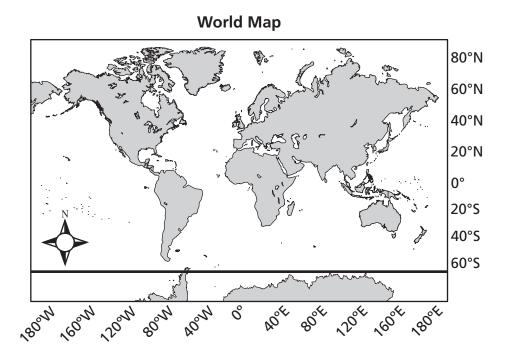


## Which title best completes this diagram?

- **A** City Abolishes Recycling Program
- **B** State Passes New Environmental Laws
- **C** Group Influences Daily Choices
- **D** Local Consumers Purchase Brand Name Products

# 42 Which phrase best defines the demographic concept of growth rate?

- **F** increase in cost of life's basic necessities
- **G** number of people living in a specific given area
- **H** pace at which a population increases
- **J** average number of years a human can expect to live

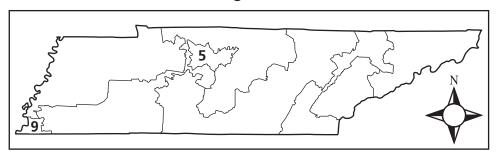


## Which line is shown on the map?

- **A** International Dateline
- **B** Prime Meridian
- **C** Tropic of Capricorn
- **D** Antarctic Circle

# 44 Study the map below.

## **Tennessee Congressional Districts**



C

D

Source: nationalatlas.gov

The size of Tennessee's 5th and 9th districts on the map most likely resulted from

- **F** boundaries of the original election districts.
- **G** increased restrictions on federal land use.
- **H** population concentrations in urban centers.
- **J** balanced statewide population growth.

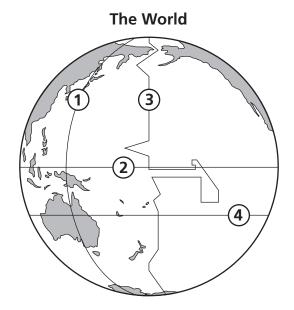
45 Which headline would most likely be published in a rural area newspaper?

A Mega Malls Extend
Shopping Hours

Local Farmers Support Environmental Cleanup of River

**B** Residents Complain About Traffic Delays

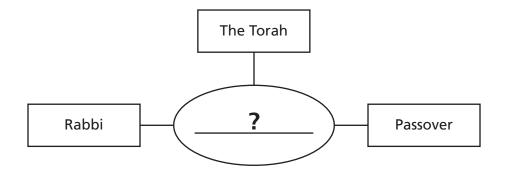
Construction Begins on Urban Transit Hub



Which number on the map shows the location of the Tropic of Capricorn?

- **F** 1
- **G** 2
- **H** 3
- **J** 4

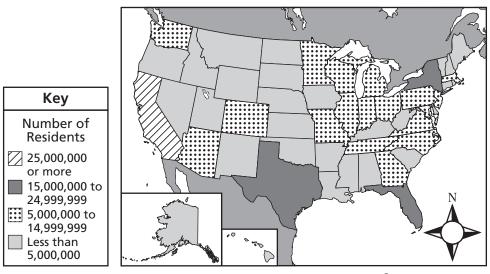
# 47 Study the diagram below.



# Which religion is best described by the diagram?

- **A** Christianity
- **B** Islam
- **C** Buddhism
- **D** Judaism





Source: census.gov

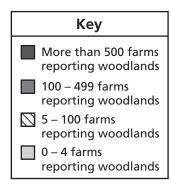
## This map would be useful for identifying the state with the

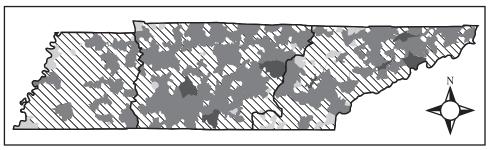
- **F** highest birth rate.
- **G** greatest population.
- **H** fewest industrial areas.
- **J** lowest elevation.

# 49 Which physical feature creates a natural boundary between Europe and Asia?

- A Himalaya Mountains
- **B** Tigris River
- **C** Ural Mountains
- **D** Ganges River

#### **Tennessee Woodlands, 2002**





Source: 2002 Census of Agriculture

## Which statement is supported by the map?

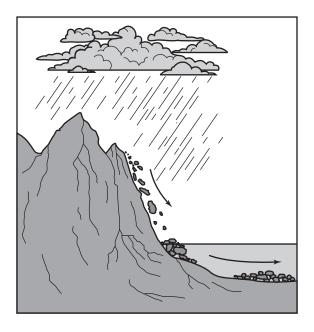
- **F** The most farms reporting woodlands are located in the Eastern Division.
- **G** The Western Division has more woodland farms than the Eastern Division.
- **H** The Middle Division has fewer acres of woodland farms.
- **J** The Middle Division has more farms reporting woodlands than the Western Division.

# **51** Study the list below.

- Loss of biodiversity
- Overcrowded streets
- Issue of waste disposal

#### Which modification of the physical environment results in these characteristics?

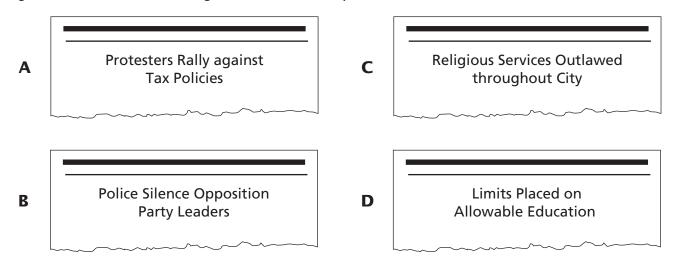
- **A** desertification
- **B** climate change
- **C** urbanization
- **D** crop irrigation



# Which physical process is shown in the image?

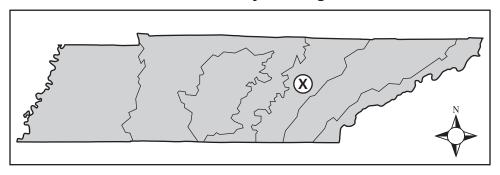
- **F** plate subduction
- **G** erosion
- **H** desertification
- J river currents

Which headline shows a practice of individual freedoms supported by most Western-European governments but limited in governments ruled by dictators?



- Which type of map would indicate levels of elevation?
  - **F** resource
  - **G** climate
  - **H** topographic
  - **J** political

# **Tennessee's Physical Regions**



## Which region on the map is marked by the X?

- **A** Central Basin
- **B** Gulf Coastal Plain
- **C** Highland Rim
- **D** Cumberland Plateau

**56** Study the table below.

Push Factors for Migration		
Unemployment		
Natural Disasters		
Civil War		
?		

#### Which push factor can be added to the table?

- **F** Agricultural Prosperity
- **G** Health Services
- **H** Technological Advancements
- **J** Religious Oppression

# **57** Study the information below.

Company A is located in Taiwan and is the leading producer of video equipment. The equipment could change the entire video industry. Company B, which is located in the United States, agrees to purchase three million dollars worth of the equipment for sale in its stores. Selling these products can lead to increased profits.

# The goods being shipped from Company A to Company B are known as

- **A** tariffs.
- **B** raw materials.
- C exports.
- **D** bartered resources.

## **58**

The objective of this Act is to restore and maintain the chemical, physical, and biological integrity of the Nation's waters.

— Federal Water Pollution Control Act, 2002

#### Which issue is addressed by this legislation?

- **F** redistributing natural resources
- **G** increasing economic development
- **H** improving environmental quality
- J reorganizing public programs

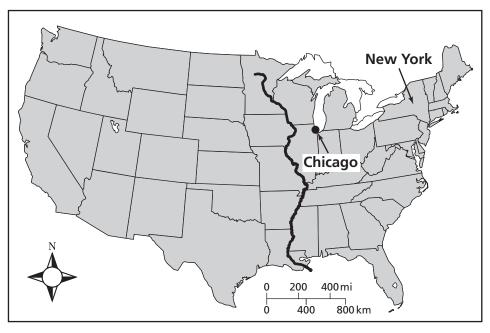
# 59 Study the chart below.

English Word	Language of Origin	
Brigade	French	
Canyon	Spanish	
Replica	Italian	
Bagel	Yiddish	

# Which factor most likely contributed to the development in this chart?

- **A** cultural integration
- **B** economic hardship
- **C** religious tradition
- **D** political isolationism

#### **Continental United States**





## Which question could best be answered using the scale on the map?

- **F** Which direction is Lake Erie from Lake Michigan?
- **G** What is the distance from Chicago to New York?
- **H** Which states border the western boundary of New Jersey?
- **J** What is the largest city east of the Mississippi River?

1 ?

- Unemployment
- Crop failure
- Natural disasters
- Political instability

2 ?

- Economic opportunities
- Fertile land
- Mild climate
- Political security

# Which pair best completes the diagram?

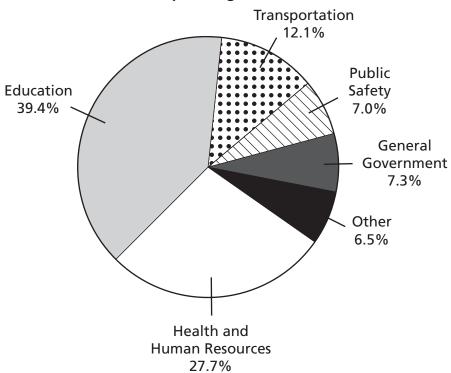
**A** 1 — Push Factors, 2 — Pull Factors

**B** 1 — Cultural Characteristics, 2 — Physical Characteristics

**C** 1 — Rural Factors, 2 — Urban Factors

**D** 1 — Population Distribution, 2 — Population Density





Source: virgina.gov

Which area most likely receives the most state government funding according to this graph?

- **F** highways
- **G** police stations
- **H** hospitals
- J public schools

# 63

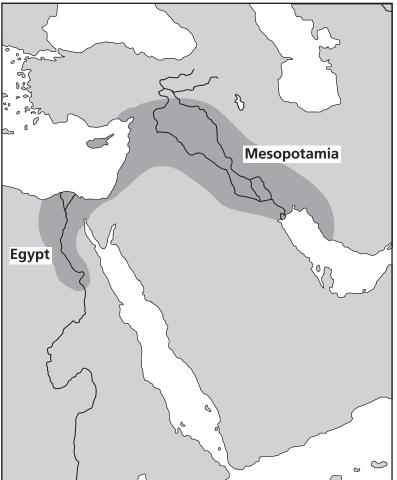
## Study the information below.

- Ruler controls most political power in government
- Ruler holds power until death or resignation
- Ruler passes power to an heir

## Which form of government is best described by the list?

- **A** theocracy
- **B** monarchy
- **C** democracy
- **D** oligarchy

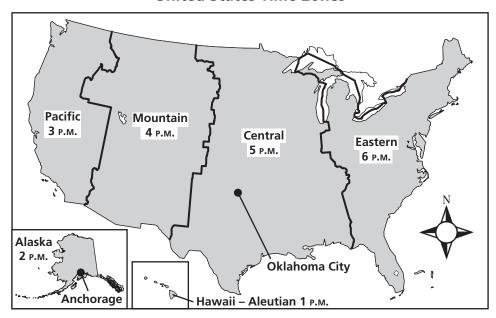
## Locations of Ancient Civilizations



Which factor <u>most</u> contributed to the development of civilizations in the darker-shaded area on the map?

- **F** Seas provided protection from invasion.
- **G** Fresh water was used to irrigate farmland.
- **H** Mountains were mined for iron ore.
- **J** Arid land provided building materials.

#### **United States Time Zones**



What time is it in Anchorage when it is 4:00 P.M. in Oklahoma City?

- **A** 1:00 P.M.
- **B** 2:00 P.M.
- **C** 5:00 P.M.
- **D** 9:00 P.M.

#### **66** Study the excerpt below.

Agricultural runoff is the single biggest source of water pollution in the nation's rivers and streams, according to the federal Environmental Protection Agency.

— New York Times, Sept. 17, 2009

#### Which factor contributes to water pollution based on the excerpt?

- **F** farming practices
- **G** large populations
- **H** acid rain
- J recycling waste
- Which factor would directly contribute to changes in the boundaries of congressional districts?
  - **A** growth of religious groups
  - **B** declining economic growth
  - **C** availability of open land
  - **D** shifts in population

#### Study the passage below.

Deforestation is a major challenge. Between 1990 and 2010 Latin America and the Caribbean and Sub-Saharan Africa experienced the greatest forest losses, followed by the Arab States.

— United Nations, Human Development Report, 2011

#### Which effect does the environmental change described in this passage have on local areas?

- **F** increase in rural populations
- **G** decrease of available ranch lands
- **H** increase in natural disasters
- **J** decrease of animal habitats
- Which map element conveys information about direction?
  - **A** projection
  - **B** legend
  - **C** bar scale
  - **D** compass rose



# Reading and Language Arts Answer Key

1	В
2	F
3	В
4	J
5	В
6	F
7	С
8	Н
9	D
10	Н
11	В
12	F
13	В
14	Н
15	С
16	G
17	D
18	G
19	D
20	J
21	С

22	Н
23	В
24	J
25	А
26	F
27	В
28	Н
29	D
30	G
31	С
32	F
33	В
34	J
35	В
36	Н
37	А
38	Н
39	В
40	F
41	D
42	F

43	Α
44	J
45	С
46	G
47	D
48	F
49	В
50	Н
51	D
52	J
53	В
54	Н
55	D
56	Н
57	Α
58	G
59	С
60	Н
61	Α
62	G
63	В

64	F
65	D
66	Н
67	D
68	G
69	D
70	G
71	Α
72	Н
73	В
74	F
	•
75	D
75	D
75 76	D J
75 76 77	D J
75 76 77 78	D J C F
75 76 77 78 79	D J C F
75 76 77 78 79 80	D J C F C

## Mathematics Answer Key

1	C
2	G
3	D
4	F
5	В
6	J
7	C
8	F
9	C
10	G
11	C
12	J
13	В
14	Н

15	В
16	F
17	D
18	F
19	В
20	J
21	Α
22	G
23	D
24	G
25	В
26	J
27	С
28	G

29	Α
30	F
31	C
32	F
33	C
34	G
35	Α
36	J
37	В
38	F
39	C
40	Н
41	Α
42	G

43	С
44	F
45	С
46	F
47	D
48	G
49	С
50	J
51	С
52	F
53	D
54	J
55	В

## Science Answer Key

1	В
2	F
3	D
4	J
5	С
6	F
7	Α
8	Н
9	D
10	F
11	D
12	F
13	D
14	J
15	В
16	Н
17	D
18	Н

19	Α
20	F
21	С
22	Н
23	Α
24	G
25	C
26	F
27	D
28	J
29	Α
30	F
31	В
32	G
33	В
34	J
35	В
36	F

37	В
38	F
39	Α
40	Η
41	D
42	F
43	В
44	Н
45	С
46	Н
47	В
48	Η
49	C
50	J
51	C
52	Н
53	В
54	Н

55	D
56	J
57	А
58	G
59	В
60	Н
61	Α
62	J
63	С
64	Н
65	В
66	F
67	С
68	Н
69	Α

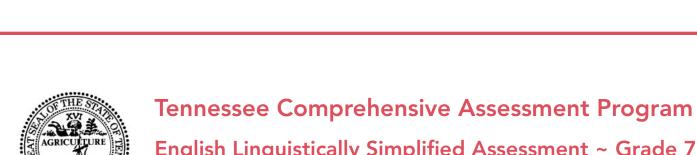
## Social Studies Answer Key

1	А
2	F
3	D
4	F
5	А
6	G
7	С
8	F
9	А
10	G
11	А
12	F
13	В
14	F
15	А
16	F
17	В
18	Н

19	Α
20	G
21	D
22	Н
23	Α
24	F
25	C
26	J
27	D
28	Η
29	C
30	Н
31	D
32	F
33	В
34	Н
35	D
36	Н

37	В
38	J
39	Α
40	F
41	С
42	Н
43	D
44	Н
45	C
46	J
47	D
48	G
49	C
50	J
51	С
52	G
53	А
54	Н

55	D
56	J
57	С
58	Н
59	А
60	G
61	А
62	J
63	В
64	G
65	А
66	F
67	D
68	J
69	D



**English Linguistically Simplified Assessment ~ Grade 7 Practice Test** 

**Version B** 

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